CLINICAL MEDICINE

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The MAKERS of THE CLINIC.

We wish we could show you the faces of all "The Makers of the Clinic," those who have already done so much and are hand in hand with your Editors in the work of the future, but this little cluster must suffice.

Our aim has always been to make the Clinic a helpful and informal interchange of thought and experience between those actively engaged in the treatment of the sick, and the work of this year will show still stronger and more concerted effort along this line.

Take hold with us and help make the Clinic second to none. With your full co-operation it can be done.

Dr. W. C. ABBOTT,
Dr. W. F. WAUGH,
Editors

Medical
Wake

CLINICAL MEDICINE

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Editorial

Fifty Years of Clinical Medicine

CLINICAL MEDICINE was conceived in the active and fertile brain of Dr. Wallace C. Abbott, of Chicago, near the beginning of the last decade of the Nineteenth Century, and was brought to birth in January, 1894, under the name of *The Alkaloidal Clinic*, with the sole original purpose of giving American physicians information regarding the principles of *dosimetric medication* as promulgated by Prof. Adolphe Burggraeve, of Ghent University, Belgium, and enthusiastically espoused by Dr. Abbott, which could not be found elsewhere in the periodical medical literature of this country.

That such information was vastly important is suggested by the fact that, at that time, scarcely any of the vegetable drugs then widely in use were in any way assayed or standardized, so that even the most capable and conscientious physicians were, in their therapeutic efforts, wholly at the mercy of the manufacturing pharmacists who prepared tinctures and extracts and of the druggists who dispensed them. That it was welcomed by the profession is proved by the success of the little magazine which, since its beginning, has been sent (except for some promotional sample copies) only to *paying subscribers*.

The first five issues contained 12 pages each, including one page of advertising, and consisted of brief articles dealing with the use of alkaloids, written in the form of letters to the Editor (Dr. Abbott). In Vol. I, No. 6, we first encounter the heading, *Leading Articles*, but even these were mostly in the form of letters. The size of the magazine increased slightly, so that the first volume contained 186 pages, including a dozen or so of decidedly primitive advertisements, several of which we are reproducing.

In Volume II, which contained 248 pages, illustrated articles on the nascent science of physical therapy (principally by C. S. Neiswanger, Ph.G.) began to appear rather regularly; and at the end of the year a few book reviews of volumes on dosimetry were included.

Volume III nearly doubled in size (486 pages) and the material presented was better organized and more varied. With Vol. IV (which contained 718 pages), Dr. William F. Waugh joined Dr. Abbott in the editorship, and some simple surgical articles were introduced.

In the first issue of Vol. V, the frontispiece (the fifth up to that time) showed the men who were making the *Clinic*, and we are reproducing it here. Several more

large portraits appeared that year, and the practice, inaugurated in the preceding volume, of using small pictures of the authors at the heads of their articles, was extended. This we revived (without realizing that it was a revival) two or three years ago.

The scope of the *Clinic* gradually broadened, so that it became of more and more general interest to all clinicians, and its size steadily increased, its success being largely due to the efforts of Mr. S. De Witt Clough, who became its business manager in 1903.

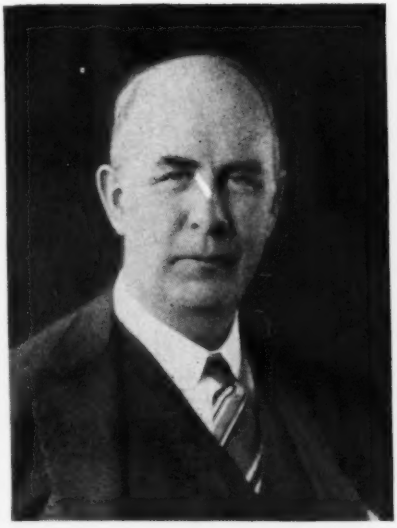
Advertisements from early issues

By 1906, the magazine had outgrown its original important but rather narrow purpose, so that its old name no longer described it, and with Vol. XIII it became *The American Journal of Clinical Medicine*, with an Editorial Cabinet consisting of Drs. W. C. Abbott, W. F. Waugh, W. J. Robinson, Emory Lanphear, and A. S. Burdick.

The January number of that volume began with a six-page editorial, signed by Drs. Abbott and Waugh, setting forth the principles and purposes of the reorganized magazine with such clarity and foresight that, in spite of several changes of name and of management, CLINICAL MEDICINE, today, is still following those principles and purposes, with such changes in methods and details as the progress of 37 years has rendered necessary or advisable. If space requirements permitted, we would reprint the whole editorial, but here are a few lines of it.

"We believe the physician should pluck the health-giving fruit, it matters not from what garden—active-principle therapy, surgery, synthetic chemistry, massage, electricity, opotherapy, hydrotherapy, serum therapy, radiotherapy, etc. — all of which offer us mighty weapons in the battle with the enemies of the human race—Disease and Death . . . In time we hope to cover the entire field of practical medicine and make this the broadest and most representative monthly medical journal in the world.

". . . The broadest plank in our platform is the safeguarding of the best personal and professional interests, as we see and believe them to be, of the true doctor and the honest pharmacist.



DR. A. S. BURDICK

DR. H. J. ACHARD

"In our editorials we shall say what we have to say in a straightforward, direct way, but having no personal animus . . . Against willful ignorance and culpable and dishonest error, we are aggressive to the limit of our capability. Personal quarrels and antipathies we have none.

"We believe in Medicine! . . . We know that it is not perfect, but we also know that it has made wonderful strides during the past decades and that its future possibilities are unlimited . . . We insist that medicine shall be used intelligently.

"We believe in the medical profession . . . and we purpose to help to place the doctor in the position of honor which is his by right."

As time went on, Dr. Alfred S. Burdick assumed more and more of the editorial duties, and in a few years was the actual and practical editor of the *Journal* which, under his wise and scholarly guidance, proceeded toward the realization of the high ideals set for it.

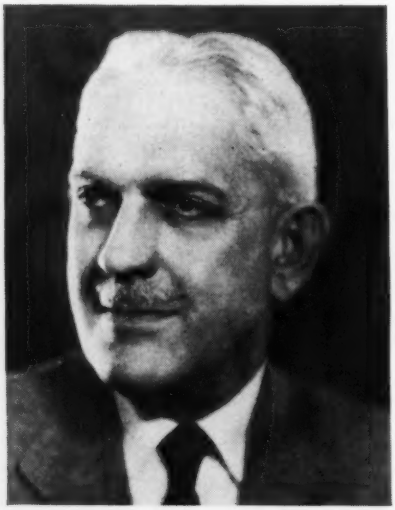
In 1910, Dr. Herman J. Achard replaced Dr. Lanphear on the Editorial Cabinet, and gradually assumed more and more of the responsibilities of carrying on the high traditions of the *Journal*, so that after the passing of Dr. Waugh, in 1918, and Dr. Abbott, in 1921, he was the actual Managing Editor, though Dr. Burdick, who has been made president of the Abbott Laboratories, retained the title of Editor-in-Chief and continued to give his wise and kindly counsel.

In 1921, the Editorial Cabinet was reorganized, consisting of Dr. A. S. Burdick, Dr. H. J. Achard, Dr. Wm. Rittenhouse, Dr. G. M. Blech, Dr. J. F. Biehn, and Dr. F. B. Kirby. In 1922, the name of Dr. George H. Candler was added to the list.

In 1924, Dr. Achard found it necessary, for personal and family reasons, to resign the Managing Editorship (though he still retains a place on the Editorial Staff) and Dr. George B. Lake was chosen to take his place in carrying forward the purposes and traditions of the Journal, the name of which had been changed, in July of that year, to CLINICAL MEDICINE. Since that time, a number of other names have been added to and dropped from the Editorial Staff, but these matters are within the knowledge of most present readers.

In 1927, the name was again changed to CLINICAL MEDICINE AND SURGERY, but there was no change in the purposes or policy of the Journal. In 1930, Dr. Lake was given

the title of Editor, but Dr. Burdick remained on the staff and continued to give his helpful advice and mature judgment until his untimely passing in February 1933.



DR. G. B. LAKE

In March, 1934, the ownership of the American Journal of Clinical Medicine Corporation passed from the Abbott Laboratories to a new group of owners, Dr. Lake became its President, as well as its Editor, and CLINICAL MEDICINE AND SURGERY became, in form and fact—as it had long been editorially—a truly *independent medical journal;* the real or potential mouthpiece of no group or faction.

From that time on, the history of this magazine is well known to most present readers, and it remains only to mention the facts that, in October, 1940, its name was restored to CLINICAL MEDICINE, and in August, 1942, its size and format were changed, for the first time in all these years—a change which has met with general and enthusiastic approval.

On this, the Golden Anniversary of the founding of this magazine, we rededicate ourselves to the principles and purposes announced by its founders in 1906, and to the statement contained in the first editorial in the March, 1934, issue: "We still aspire to be, not merely another medical journal, but a real *service* to our readers," and with God's help and that of our loyal friends, we enter upon the second half of the century with high hopes and a firm purpose to make "C. M." even more indispensably helpful to the greatest of all the specialists — the *General Clinician and Family Doctor.*

The Old Guard

By GEORGE H. CANDLER, M.D., *Waukegan, Ill.*

WHEN the twentieth century was just beginning to sit up and say "Goo," I joined the "Alkaloidal Twins"—Abbott and Waugh—in their effort to get the medical profession of this country to give up the use of fluid extracts, tinctures, elixirs, and pet nostrums, and adopt the principles of Burggraeve, which demanded the treatment of certain definite pathologic conditions with small, frequently-repeated doses of definitely-acting medicinal agents — preferably alkaloids —"*to effect*, remedial or physiologic."

At that time (1902) the Abbott Alkaloidal Co. was manufacturing alkaloidal granules, a Saline Laxative, and a moderate number of tablets containing, as a rule, combinations of concentrated drugs designed to meet symptom complexes which occurred, with more or less frequency, in the everyday practice of the "Family Physician" throughout the country. In order to teach these gentlemen the general idea (*Positive Therapeutics*), and to get them to grasp intelligently the remedial and physiologic

action of the various available alkaloids and allied principles, a monthly journal dealing with the subject was found to be absolutely essential and, out of this necessity, the *Alkaloidal Clinic* was born.

By 1903, the doctors, from Dan to Beersheba—and even from the Isles of the Sea, India, and "jolly old Albion"—were sending in letters asking just how to do this, or how to avoid doing something else, and so an enormous strictly "professional" correspondence developed. From this mass of material came the "Query Department" in the *Clinic* which, for many years, I had the pleasure of conducting. I am reasonably sure that, in the space of three months, we covered everything from the removal of tapeworm to the prompt recognition and correct treatment of the exanthems, pneumonia, Erb's paralysis, and Hodgkin's disease—to say nothing of a vast and astonishing number of pathologic conditions, sketchily described by the practitioners and accompanied by an agonized request for a definite diagnosis and detailed instructions for the indicated medication!

Editorial Room of the Old *Clinic*—1903. Staff (at back, left to right) Dr. Abbott, Dr. Waugh, Dr. Burdick (seated); center, left, Dr. Epstein; right front, Dr. Candler and secretary. Mr. Clough's desk at left front.

Under such circumstances, we gradually came to the conclusion that in "Alkalometry" we had a therapeutic method easily a hundred years ahead of that of the ultra-regular "allopath," and so, naturally, the Abbott Alkaloidal headquarters rapidly became, not only a supply house of pharmaceuticals, but a sort of postgraduate college, to which practitioners could turn for definite professional information and help. Ultimately they began to bring in their more difficult ambulant cases for examination, and when they were given a diagnosis and recommendations for treatment, both the doctor and his patient went home convinced that everything that could possibly be done had been accomplished. As a matter of fact, the records will show hundreds of successes against a few dozen failures.

As the years passed, the Abbott Company and the *Clinic* grew with astounding rapidity, despite two disastrous fires, bank failures, the first World War, the subsequent depressions, *et hoc genus omne*.

About that time, too, the *Alkaloidal Clinic* had assumed a more dignified tone, and in each number presented two or three special articles by "Eminent Practi-

tioners," from which the family doctor was expected to winnow out the good seed and reject the chaff. With this change, finally came the blessing of the A.M.A., which had been more or less withheld before, because of the taint of "House Organ" which, the secretary of the association insisted, hung heavily about the *Clinic*. From that time until the Abbott Laboratories grew so big that the publication of a monthly medical journal became too much of a strain upon the personnel and it was decided advisable to let it pass into other hands, the *American Journal of Clinical Medicine* continued to grow and is today one of the leading independent medical periodicals in the United States.

The accompanying picture of the editorial room of the old *Clinic* should prove of interest. This picture was taken in 1903, about a month after Dr. A. S. Burdick joined the editorial staff. Unhappily, every one of the men there present has passed away, with the exception of this writer. The vacant desk, however, which belonged to the advertising department, should have had Mr. S. DeWitt Clough (the present president of Abbott Laboratories) seated at it.

There is an old, old saying: "The good die young." Naturally I, for one, don't believe it. Good men and things, like vintage wines, grow better with time, provided, of course, they do not allow cobwebs to smother them.

A Word From the Business Manager

IN 1905 I became Business Manager of the old *Clinic*. The job always was a pleasant one, particularly in the early days when I devoted all of my time to this work.

One of the greatest things a person can do, in my opinion, is to make available to many, information of interest and value which might otherwise be lost or very limited in scope. This is why the publisher, the lecturer, the preacher, the physician, and even the advertising man has a priority, I believe, on much of the happiness that comes with accomplishment and service to others.

MR. CLOUGH

While it is true that many other occupations afford opportunities for service, the individual who shares to the greatest degree his knowledge with others receives in return the greatest dividends in satisfaction and service.

For this reason, I congratulate you as Editor and Publisher of CLINICAL MEDICINE and extend to you my very best wishes for continued usefulness and service in your chosen profession.

S. DEWITT CLOUGH
President Abbott Laboratories

North Chicago, Ill.

Progress in the Science and Art of Medicine — 1942

AT THIS writing, the three new developments of the past year that appear to offer the greatest possibilities for long-range helpfulness for the health and welfare of the people are: The *Kenny methods* for the treatment of *poliomyelitis;* the *Stader splint*, for the treatment of fractures of long bones and the mandible (these two are discussed briefly elsewhere in this issue); and the announcement of *Allergosil* (ethylene disulfonate), for the treatment of *allergic conditions*. This preparation was discussed in our November and December, 1942, issues, and will soon be available commercially.

Another new idea (also discussed elsewhere in this issue) that should, perhaps, be included with the first three, is the use of *continuous caudal anesthesia in obstetrics*.

The production of desiccated blood plasma began in 1941, but the enormous development of this process, using the

blood of millions of donors all over the country, deserves mention here; and so does the newer method of isolating the *serum proteins* (especially ablumin), for the same therapeutic purposes.

Therapeutics

The newest sulfonamide is *succinysulfathiazole*, which seems to be an important drug for the production of *intestinal antisepsis* prior to operations on the colon.

The *subcutaneous or subfascial implantation* of testosterone pellets in *male hypogonadism*, and a similar use of estrogens *dissolved in water*, in treating *ovarian deficiencies*, are gaining ground and seem to be important developments.

Amino acids are now prepared for *parenteral* (especially intravenous) use, in cases where they cannot be given satisfactorily by mouth.

A new *surgical dressing*, especially useful in *burns* and *skin grafting*, consists of a thin film of methyl cellulose and triethanolamine, incorporating sulfadiazine or sulfanilamide.

Typhus vaccine is now being prepared with water instead of normal human serum, which appears to obviate the production of jaundice. Appraisal of its prophylactic action awaits the test of time and experience.

The increasing use of *heparin*, for the prevention, and to some extent the treatment of thrombosis is worthy of mention, especially as new uses for it (prevention or amelioration of *x-ray pneumonitis* and postoperative adhesions) were announced in 1942. Reports on the therapeutically similar drug, *dicoumarin*, which is effective when given by mouth, suggest that it may prove even more important in the same fields.

Sulfadiazine has proved helpful in a case of *bubonic plague*, recently reported in California.

For some years, physicians have depended largely upon bananas in the treatment of *celiac disease*, but now that war conditions have made this fruit scarce or unobtainable, it has been found that strained apples, apricots, and pears work almost as satisfactorily. Moreover, Dr. C. D. May, *et al* reported (*J. Pediat.*, Sept., 1942) excellent results in this disease from daily hypodermic injections or large doses of crude liver extract and vitamin B complex.

Apparatus and Appliances

The most spectacular apparatus introduced during the past year is the *Surgical Stitching Instrument* (Singer Sewing Machine Co.), which was shown at two national meetings.

The Alexander *mouth-to-mouth insufflator*, for use in *resuscitation*, and the De Bakey *scalpel blade*, which gives a useful cutting edge at an angle of 75 degrees, were also interesting developments, described in "C.M." for October, 1942.

The *electrocardiograph - stethograph* bids fair to make vast improvements in the diagnosis and classification of heart lesions.

The Becton-Dickinson *intravenous anesthesia outfit* should remove many of the objections to this method and popularize it.

A *portable electron microscope*, which should bring this important apparatus within the reach of many hospitals and private investigators, has been developed by the Radio Corporation of America.

Plastics entered into two appliances which seem to have considerable possibilities: cups, for use in *arthroplasties*, and a *surgical window*, through which the progress of wounds can be observed.

National Physicians Committee

One of the most significant developments of the past year has been the success of the efforts of the National Physicians Committee for the Extension of Medical Service, whose work has been mentioned in our pages a number of times, in acquainting the people with the advantages of individual medical service and the dangers of Politicalized Medicine.

At the beginning of 1942, the complete socialization of the medical profession seemed inevitable and rapidly approaching, but enough physicians and laymen were awakened so that, following the November election, *more than 300 Congressmen* (out of a total of 435) *have unqualifiedly pledged themselves to pre-*

serve the independence of the medical profession.

This is a splendid achievement, but it cost an unbelievable amount of work and planning on the part of the active members of the Committee, and large sums of money (advertising is *expensive*, but is *worth what it costs*), contributed by doctors all over the country. And the job is not finished, but only well begun! Send as much money as you can spare to the National Physicians Committee, Pittsfield Bldg., Chicago, Ill., and charge it to "insurance" —*which it is*, against personal and professional ruin.

Many things of interest have transpired this past year, which are not mentioned here, but we believe we have touched most of the really high spots of progress.

◆

It behooves ordinary mortals to make all the use they can of genius when, in any form, it is vouchsafed to them.—Sir Oliver Lodge.

◆

The Seminar and the Graduate Course

ONCE more, the *Seminar* is in a bad way, and will not appear this month, as no one has sent in a *problem;* besides which only two discussions have arrived when this is written.

If you like and want this feature, you *positively must support* it, with problems as well as discussions. It will appear only when material is at hand to keep it going. It's "up to *you*."

Under present conditions, it is decidedly difficult to get able teachers to help with the *Graduate Course*. We keep working at it, and hope to have another symposium ere long.

◆

The art of using moderate abilities to advantage, often brings greater results than actual brilliance.—La Rochefocauld.

◆

To deny that which is apparent, is stupidity. To wish for that which is not obtainable is foolish. To accept that which is, and work with it is the only wisdom.—Manly P. Hall.

A Balanced Life

EVERYBODY knows that a plane surface, like the seat of a chair or the top of a table, cannot be sustained by less than three legs. If some rural reader thinks to offer the homely, one-legged milking stool as an exception, let him remember that the milker furnishes the other two legs.

No more can a satisfying human life stand on one leg. Dr. Richard C. Cabot, in his book, "What Men Live By," advises four legs, likening them to the four equal arms of a Greek cross and naming them *Love* (marriage and family life); *Work* (which should be congenial); *Play* (which must be wholesome); and *Worship* (devotion to something bigger than self).

Baron Eugene Ferson also recommended four "foundation stones" for the house of life, which should bear, *equally*, the weight of every act and experience, and called them *Energy*, *Intelligence*, *Sincerity*, and *Joy*.

Another system (this time of three legs) can be constructed from the fact that man has, today, three faculties which are distinct from each other and of *equal importance* to a balanced life: The *reasoning* faculty, which enables us to perceive *truth only;* the *moral* faculty, which permits us to perceive *right only;* and the *esthetic* faculty, which makes us aware of *beauty only*. No one of these can "pinch hit" for another.

The man who works eighteen hours a day and sleeps six has nothing to brag of — though he is apt to do so, and thus expose his foolishness. The man who plays all the time is a parasite on the body politic. These are the two arms of the cross that are most apt to be hypertrophied, at the expense of the other two or three. The idea is not that an equal amount of *time* should be given to all four, but that each should be given equally serious *consideration* in planning one's *curriculum vitae*.

Of the four "foundation stones," *Joy* is the one most likely to be absent or inadequate; but there are few whose character structure rests equally on all four, and if less than three are in opera-

tion the life is dangerously out of balance.

Of the three basic faculties, the illative or *reasoning faculty* seems to be considered, by many, as being the only one of importance, and the result is that millions of human lives are shockingly lopsided and that truly happy people are pitifully rare.

The construction and maintenance of a balanced (and therefore happy) life is *not impossible*, or even impracticable, for any person who is of sound mind and whose will is functioning as well as the average. It is largely a matter of *recognizing* that the life *needs* to be balanced, and then setting about the job with as much sense and diligence as any wise man will apply to all of his enterprises that he considers important.

The beginning of the calendar year is, traditionally, a time of fresh beginnings, so those who set about reorganizing their outer and *inner* activities at this time will find it easier than it would be at any other, because they have the assistance of the trend of mass thought, which is a *potent force*.

Those who think upon these things, *now*, and then *do something about it*, will be certain to have—

A HAPPY NEW YEAR.

NEXT MONTH

Dr. Wallace Marshall, of Appleton, Wis., will discuss the status of Wassermann reactions and their relation to syphilophobia.

Dr. Charles D. Marple, of San Rafael, Calif., will present a brief resume of coccidioidomycosis, with illustrations.

COMING SOON

"Diseases of the Thyroid Gland," by Arnold S. Jackson, M.D., F.A.C.S., Madison, Wis.

"Notes from the International Postgraduate Medical Assembly," reported by George B. Lake, M.D., Waukegan, Ill.

ON A PERSIAN HOUSETOP

A joy escaped will haunt thee till the day
Thou findest out just how it slipped away;
But a remembered joy will warm thy heart
While thou dost use this habit of frail clay.
Look where yon maid draws water from the well;
Observe the beauty where her firm breasts swell.
The joy thou hast, or couldst have had, with her
Will make for thee a bit of heaven or hell.
Thou hast this hour, and all it offers thee—
The lovers' moon, wind music in a tree,
Good sparkling talk when keen friends gather round,
And other riches, God-bestowed and free.
Live, then, this hour, and do not be misled.
There's no sharp line between the quick and dead.

G.B.L.

LEADING ARTICLES

War Endocrinology and Recent Progress

By JAMES H. HUTTON, M.D., F.A.C.P., *Chicago, Ill.*

In these times of shortage and stress, many elaborate laboratory tests are impracticable. Dr. Hutton explains how to use clinical studies for diagnosing endocrine disorders.

THE war emphasizes, as never before, our need for man power and woman power. At the same time the military forces reduce the number of our laboratory and hospital workers; consequently it becomes necessary that we reduce our diagnostic tests as much as is consistent with good work and adequate treatment. We must rely as much as we can for diagnosis on our five senses.

To help in this situation, every specialty should make available to workers in general, or other fields of medicine, the basic facts of that specialty, so that he who runs may read the most important signs of major disorders in any part of the body. It is my purpose to show how some endocrine disorders may be recognized with reasonable certainty, and adequately treated, with the aid of very little laboratory work, and also to call attention to some recent developments in the field of endocrinology.

At least two companies have recently offered estrone or theelin in *aqueous suspension* — 2 mg. to the cc. When this is injected subcutaneously, the body quickly absorbs the water and then slowly uses the estrogenic substance. The advantage of this is that the slow absorption makes the effect last longer than when the same substance is given in oil, and the body is not subjected immediately to the full effect of a large dose. One injection will control menopausal symptoms much longer than when the same amount is given in oil. The frequency of needed injections will vary from one patient to another, and perhaps in the same patient at different times. Each woman is a law unto herself and the frequency of injections must be determined for each patient.

Diethylstilbestrol, and many related compounds, have been more widely used in the past year. They are a valuable addition to our armamentarium, but in my hands are effective in comparatively few cases, because of the unpleasant reactions accompanying their use.

Premarin (Ayerst, McKenna, and Harrison) is the latest addition to this type of medication, has been useful in my practice, and causes few unpleasant side reactions. The dose is from one to three pills daily.

There are signs of a return to sanity in the treatment of menopausal symptoms. The idea has been rather prevalent that only large doses — 10,000 units and upward, daily or less often — are effective. This is an erroneous notion. Small doses (1,000 to 2,000 units twice a week) will control most cases. Some women are quite comfortable on small doses, but *definitely worse on large doses.*

There is need for a *human unit* in all of these; but that merely means that the dose has to be adjusted to each individual patient and every practitioner will have to determine this for himself.

Mild Endocrinopathies

For the duration, we must learn to recognize and adequately treat the milder and therefore commoner endocrinopathies. Among the commonest and most neglected are mild forms of **Froehlich's syndrome.** This may be due to the unprofitable discussion that has been carried on as to the difficulty of accurate diagnosis. During the war, forget all that and remember that, for practical purposes, this syndrome is represented

by most obese youngsters with hypoplastic genitalia.

These patients all need thyroid. Begin with one grain (64 mg.) a day and increase by ¼ grain a day, every fifth day, until it produces *tachycardia, tremor, nervousness, insomnia,* or a slight *rise in temperature.* Reduce the dose about 25 per cent below this level and continue until the condition is corrected. The dose may need to be increased or decreased from time to time after that, but it can be controlled by observation of the phenomena mentioned. Frequent determinations of the basal metabolic rate (B.M.R.) are not necessary, though it is comforting to check it occasionally, if this is convenient.

They all need posterior pituitary extract, in doses just short of the amount that causes abdominal pain or nausea. This has to be determined by trial. These injections should be given two or three times a week for two months. After that the intervals between injections should be gradually increased.

Those of less than normal height should have whole anterior pituitary extract — Polyansyn or one standardized on its *growth hormone* content, but containing also gonadotropic factors. These may be given, *in the same syringe,* at the same time as the posterior lobe extract.

Those who are of more than average height should be given, instead of anterior lobe extract, some gonadotropic compound such as Antuitrin-S, Follutein, A.P.L., etc., in doses of from 50 to 100 units. These may be given in the same way as the anterior lobe extract. Gonadotropic preparations are thought to hasten closure of the epiphyseal lines, and so should *not* be given to children of less than average height.

Certain precautions should be observed: The urine should be examined once a month, as this treatment is occasionally followed by glycosuria. Epiphyseal closure is not likely to be unduly hastened without accompanying precocious genital development, so occasional inspections of the genitalia will give one a good idea of whether one is proceding safely. It is beter to give small doses of the gonadotropic preparations until one is sure that development cannot be stimulated by them; precocious development sometimes accompanies too-large doses.

If young people develop too slowly, testosterone propionate, in doses of from 5 to 10 mg. twice a week for a month may hasten growth.

An example of what may be accomplished in these cases is furnished by Mr. B. L., aged 22, who came under observation July 10, 1941. He had been rejected by the Army because of enlarged breasts, hypoplastic genitalia, obesity of the girdle type, and deformed feet. He was 5 feet 5½ inches in height and weighed 167 pounds. The only additional significant physical findings were medium-sized, widely-spaced upper central incisors and very small lateral incisors. The testes were in the scrotum but were very small, as was the penis also. The abdomen was of the pituitary type, having four folds. The urine, blood-cell count and blood chemistry studies were normal. The B.M.R. was minus 13 percent. He tolerated two grains of thyroid per day and was given anterior pituitary extract, 0.5 cc., and obstetric pituitrin, 5 minims twice weekly. By January 10, 1942 he weighed 135 pounds, the genitalia had greatly increased in size, and the Army drafted him for active service.

School Children

School boards and departments of Public Health and Public Welfare should be interested in endocrine disorders. Pituitary and thyroid deficiency are often responsible for poor scholarship and for so-called repeaters. These disorders mark their victims so plainly that inspection by the school doctor or nurses should note enough signs to send the child to the family doctor or to a consulting endocrinologist, who should be attached to each of these organizations.

Children who are kept out of school for more than a few days by mumps, measles, scarlet fever, diphtheria, or pneumonia should be watched for several months for signs of pituitary damage. These are: the development of obesity, retardation of the rate of growth or sexual development, or a decline in scholastic standing. If any of these things occur, the family should be notified of the possibilities immediately.

The present public health campaigns, as they relate to maternal and child health, take no cognizance of endocrine disorders; but pituitary deficiency may be responsible for sterility, habitual abortion, or inability of the mother to nurse her baby. Hypothyroidism in the mother, indicated sometimes by a too-great gain in weight during pregnancy, may be responsible for mentally retarded or defective children.

Endocrine disorders are much more

prevalent among the inmates of mental hospitals than they are among the population at large. Whether these two facts have a causal relation has not been determined. In the Endocrine Clinic in the State Hospital at Elgin, Ill., I saw 314 patients, of whom 34 percent were discharged, some of them without treatment (17.3 per cent is the discharge rate of the general mental hospital population). This indicates only that those patients who have some endocrine disorder have a more hopeful outlook than the others, and consequently should be segregated so far as possible from the other inmates and more careful attention paid to them, in the hope that more of them can be gotten out of these institutions and cease to be a burden on the taxpayers.

Pituitary Deficiency

Pituitary deficiency may be recognized many times on the basis of the history, physical examination, and therapeutic tests, where laboratory work cannot be obtained. A case history will illustrate this point:

A 25-year-old nurse came under observation November 4, 1937. She complained that, for the preceding 18 months, she had had a feeling of tightness about her head, and vomited when she was nervous. She frequently fainted after exertion. Four times a year she had a migrainous headache three days before her menstrual periods. She had frequent attacks of urticaria (allergic manifestations are common in pituitary deficiency); had gained ten pounds in the week before I saw her (such a rapid gain is usually due to hypopituitarism); and was emotional, tearful, and introspective, as victims of ovarian insufficiency often are.

Her first menstrual period, at the age of 12, lasted three weeks—a further sign of hypopituitarism. At the age of 22 she had typhoid and her appendix was removed—events which tend to damage the pituitary. Afterward her periods occurred at three-to-five-week intervals and the flow was scant—another indication of pituitary and ovarian insufficiency. She had had mumps, measles and scarlet fever, all of which tend to damage the pituitary. Mumps often attacks the ovaries directly, though nothing in the history indicated that this had happened to her.

Her height was 5 feet 6 inches, indicating an abundance of the *growth* hormone during her early years (not infrequently such women have some deficiency of the pituitary *sex* hormone). Her weight was 156½ pounds. Her B.M.R. ranged from minus 5 to 25 per cent (in the absence of physical signs of hypothyroidism such a low reading is often due to hypopituitarism). Her obesity, too, was of the pituitary type. The pubic hair was of the male type and there was some hair about the nipples.

She had been told that her trouble was largely mental and advised to think less about herself and more about her work, which was very exacting and sometimes exciting.

On the basis of the history of premenstrual migrainous headaches, a menorrhagic first period, scanty and irregular periods after typhoid and appendectomy, emotional and gastrointestinal upsets, the rapid gain in weight, and the physical findings of the height, pituitary type of obesity, and lack of other significant findings, a diagnosis was made of pituitary and ovarian insufficiency.

Treatment consisted of anterior pituitary extract (*not* Antuitrin-S), 0.5 cc. twice weekly, with ovarian residue, 1 cc., given in the same syringe at the same time, and ovarian concentrate (Armour) 1 capsule three times a day, by mouth. Her symptoms rapidly decreased in severity and shortly disappeared completely.

The literature indicates that, after hypoglycemic symptoms were found in association with islet tumors of the pancreas, there was at least a tendency to call all syndromes associated with hypoglycemia "**hyperinsulinism,**" due either to islet tumor or hyperactivity of the islet cells, and cases have been reported as hyperinsulinism in which, during life, the symptoms were better relieved by pituitary and adrenal medication than by any other measures. At autopsy the pancreas was less than normal size.

Duncan[1] has pointed out that **spontaneous hypoglycemia** occurs in connection with several conditions, and that islet-cell tumors show symptoms and points of difference that set them apart from other conditions accompanied by hypoglycemia. He sets up certain criteria for the recognition of hyperinsulinism, as follows:

1. Fasting blood sugar below 60 mg. per 100 cc.
2. Hypoglycemic symptoms, with a blood sugar below 50 mg. during attacks.
3. Immediate relief of symptoms following intravenous administration of dextrose.
4. Glucose tolerance test shows a low fasting blood sugar, the highest peak during the test rarely exceeding 120

[1] Duncan, Garfield G.: "Diseases of Metabolism." W. B. Saunders Co., Philadelphia, 1942, p. 659.

mg. per 100 cc. with a drop of blood sugar to subnormal levels within two hours.

If these dicta are widely diffused among the profession, perhaps a few victims of spontaneous hypoglycemia will be saved from laparotomy with, perhaps, loss of part of their pancreas.

Spontaneous hypoglycemia of mild degree occurs frequently. Victims are likely to complain of headache, weakness, and irritability on awakening or just before meal time. The condition is easily recognized. Have them take a lump of sugar as soon as they wake or an hour or so before meal time. If this relieves or prevents the symptoms, they may be assumed to be due to hypoglycemia. A search may then be instituted for the cause. Often it is due to hypopituitarism or hypoadrenia, and this possibility should be explored.

The diagnosis of *hyperparathyroidism* usually depends on the laboratory findings of a high serum calcium (12 to 20 mg.); increased calcium in the urine; low serum phosphorus (1 to 3 mg.); high serum phosphatase; the X-ray appearance of the bones; and disappearance of the lamina dura. This is a layer of bone bordering the tooth sockets. Its visibility in films is regarded as evidence against the diagnosis of hyperparathyroidism. However, it has recently been pointed out that, with an adequate intake of calcium, there may be no bone lesions and that the finding of a low serum phosphorus and increased output of calcium is highly indicative of this disorder.

A few diagnostic hints:

Rapid gain in weight, with coincident decline in health, after pregnancy is often due to hypopituitarism.

Rapid gain in weight, with coincident decrease in the frequency or amount of flow during the menses, is usually due to pituitary deficiency.

Obesity, with diurnal somnolence and nocturnal insomnia, is usually due to pituitary and thyroid deficiency.

Children who are victims of hypopituitarism are often slow in stopping nocturnal enuresis, or at the age of from 8 to 11 they may resume the habit.

Women who are victims of pituitary obesity often give a history of having been small babies at birth. They cut their teeth early and were active, energetic, and underweight until after puberty, marriage, pregnancy, or some infection. They then began to gain weight rapidly and later added to their obesity symptoms of hypopituitarism.

Victims of hypopituitarism often complain of headache, chilliness, or a marked craving for sweets just before each menstrual period.

Some advance has been made in the study of pituitary, adrenal, and testicular function by measuring the female sex hormone (F.S.H.) and 17-ketosteroids in the urine and by watching the patient's blood sugar response to injection of insulin. The amount of sodium pregnandiol glucuronidate in the urine is a measure of corpus luteum activity. However, all of these tests require considerable laboratory equipment, available to comparatively few men, and so are unimportant at this time.

There has been some tendency to regard the vaginal smear as necessary to the correct diagnosis of ovarian insufficiency, in the menopause or as an indication of the adequacy of treatment. For the duration, neither of these ideas needs to be accepted. If smears can be made without undue demands on overworked laboratory personnel or the patient's purse, well and good; otherwise disregard them.

Testosterone propionate, in doses of 25 mg. three times a week, has been reported as relieving **angina pectoris.** It is worthy of a trial. Raab[2] has reported relief of angina pectoris by irradiation of the adrenal regions.

I have seen one patient who appeared to have been markedly improved by this treatment. If one uses it, one should follow Raab's technic. I have seen many cases of precordial pain in hypertensive patients relieved by low-dose irradiation of the pituitary and adrenal regions. These did not rate as real cases of angina pectoris.

In spite of all that has been written, we do not understand the endocrine disorders forming the background of **functional uterine bleeding** any better than we understand the woman herself. It seems certain, however, that better results are obtained if we study the entire endocrine make-up of the woman, instead of limiting our investigations to a study of the estrogenic hormone content of the blood or urine or the architecture of the uterine mucosa. Many such cases show plenty of evidence of pituitary and

[2] Raab, W.: Abnormal Suprarenal Discharges in Angina Pectoris and Their Control by X-Ray Therapy. *J. Clin. Endocrinol.*, Dec., 1941.

thyroid dyscrasia or of some ovarian insufficiency.

Testosterone propionate, in doses of 25 mg. daily, may be given until the bleeding is controlled so that a more leisurely study of the woman may be made. This is not without danger of producing signs of masculinization, which should be carefully watched for. Injections should be stopped at once should any such signs appear.

Finally, we should remember that practices, at some time empiric, later are found to be scientifically correct. *But this transformation from empiric to scientific makes them no more effective.* Consequently, men in private practice should not disregard their clinical observations merely because the experimentalists have failed to verify their accuracy on the rat or the guinea pig.

30 No. Michigan Ave.

Progress in Skin Grafting and Facial Surgery Technics*

By JOSEPH C. URKOV, M.D., *Chicago, Ill.*

For years to come, plastic surgery will be more important than it has been for a decade or more, and all clinicians can gain practical knowledge from Dr. Urkov's terse and helpful suggestions.

MANY advances have been made in the technic of skin grafting during the past fifteen years, as compared with the accepted operative procedures in World War I.

The surgical technic of today involves several high points, when dealing with lipomas, sebaceous cysts, excision of tumors involving the skin and mucous membrane, the immediate closure of wounds, and the repair of old, disfiguring scars.

These are:

1. Infiltrating the operative area with procaine and epinephrin;
2. Use of an aspirator to keep the field clean and dry;
3. Elimination of dead space;
4. The least possible crushing of tissues;
5. Coaptation of the margins of the skin with single, interrupted, mattress or subcuticular sutures;
6. A steady optimum pressure; and
7. Immobilization.

The local anesthetic may be injected in the operative site, even when a general anesthetic is given. The procaine will keep the area anesthetized for some time after the effects of the general anesthetic have worn off, and will facilitate immobilization; while epinephrin will limit the amount of bleeding during the operation.

The aspirator, such as is used in tonsil surgery, gives better vision and minimizes crushing of tissues that involve the bleeders. When the operation is in the oral cavity, the aspirator will keep the field clear, so that one can continue the operation without crushing tissues to stop minor bleeding, which, in this region, is usually in the membrane itself or in the tissues immediately underlying it, and can be controlled when the closure sutures are taken. Clamping the bleeders may devitalize the tissue that it incorporates and retard healing. Continuous, mild aspiration allows the surgeon to proceed with the work while normal agglutination seals the small bleeders.

When a tumor or cyst is removed, it is advisable to take a few stitches into the subcutaneous tissue, to eliminate dead space; otherwise, seepage may result in blood clots or a hematoma. If a drain is desirable, *do not use gauze;* instead, use gutta percha or rubber, *attach a long strand of suture material to the end of the drain,* and allow it to extend beyond the dressing, fastening the end to the skin with collodion or adhesive plaster. After 24 to 48 hours, the drain can be pulled out without disturbing the dressing and exposing the wound.

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Suturing

When skin sutures are taken, the *finest possible suture material* should be used, and the coaptation of skin edges should be made with *practically no tension.* Freely undermine the tissue beneath the skin and unite subtaneous tissue with subcutaneous tissue, and skin with skin *only.*

In closing the skin of the lip, eyelid, or face and neck wounds that can be approximated *without tension,* use interrupted sutures with swedged needles and make a double or triple overlap, drawn together without a tie knot. (See Fig. 1). Leave the ends of the suture long and varnish them to the skin with compound tincture of benzoin or collodion. This method eliminates knots and minimizes the chances of stitch marks.

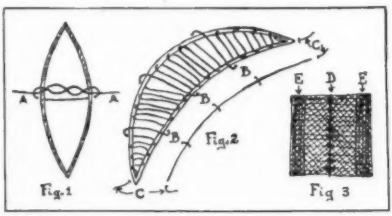

Fig. 1: Overlapped suture without a knot (only one is shown, for simplicity of diagram; others are placed similarly). The wound is closed by steady traction on the ends, A, which are then fastened to the skin, an inch or more from the wound, with collodion.

Fig. 2: Subcuticular and exposed sutures (B) in an irregular wound, which is closed by steady traction on the ends, C. The closed wound is shown below, with the outside loops that may be clipped to facilitate removal.

Fig. 3: Gauze support for wound; (D) the sutured wound, diagrammed as showing through gauze; (E) ends of gauze fastened to skin with collodion.

A good subcuticular closure offers the best chance of a hair-line scar. If the wound is long or irregular, it is advisable to *come out* once or twice in making the closure (See Fig. 2). The advantages of this method are, first, the course of the closure can be changed without creating a bulky approximation; and second, the suture will have three or more *small* ends instead of one long suture that may break on removal and a portion of it be lost in the under structure.

As soon as the sutures are placed, the margins should be supported with tension strips, using collodion. Two or more one-inch width strips of gauze are placed on one side of the wound and collodion is applied and allowed to dry. The gauze strips are then carried over to the opposite side of the wound and fastened with collodion (see Fig. 3).

The wound is then covered with layers of gauze, over which are placed several small, moist marine sponges, or moist cotton, and then more thicknesses of gauze, followed with the application of elasto-plastic bandages or a starch dressing. This will produce a steady optimum pressure and prevent seepage and the formation of a hematoma, thereby facilitating healing by first intention.

Face Wounds

First aid surgery of the face and neck usually consists of a thorough debridement, closure of the wound, and a protective dressing that is changed every day or two until the sutures are removed. The wound is dressed for another week, and then the patient is on his own.

When repairing face wounds it is important to consider the esthetic factor. An irregular, depressed, or hypertrophied scar of the face assumes tremendous proportions to the patient and may place the surgeon in an apologetic situation, because his work is considered poorly done.

So far as it is possible, healing should be by first intention; the suture line regular and narrow; and the end result a permanent, fine scar line. This result may be accomplished if the surgeon does a thorough debridement; approximates subcutaneous tissue with subcutaneous tissue; uses a subcuticular closure, followed by a firm pressure dressing that incorporates moist marine sponges, wet cotton, or dry lint (to prevent effusion and hematoma); and immobilization, if possible. When the sutures are removed, tension support with collodion strips is continued for an additional two weeks.

A wound of the face and neck, seen later than eight hours from the time of the accident, *should not be tightly closed.* It is better to treat it as an *infected* wound, with chemotherapy, drainage, and constant wet antiseptic dressings. When healing is complete, the irregular, wide scar is carefully excised, the region undermined, and approximation made without tension.

The removal of a wide scar of the face at one operation may cause distortion and, if a skin graft or flap is not indicated, the method of choice seems to be partial excision and the removal of an oval section from the center of the scar, and at each succeeding operation the surgical scar and an additional oval are removed (see Fig. 4). This may entail several operations, over a long period

of time, but the ultimate result justifies the effort.

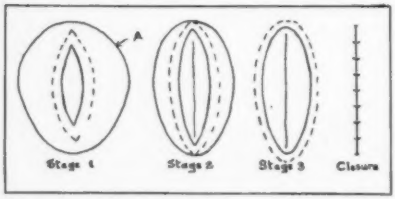

Fig. 4: Removal of a wide scar in stages. Solid lines show the area of tissue to be removed; dotted lines, the extent of undermining before closure. The line A indicates the original extent of the scar.

In closing a small operative area, two single-pointed, sharp, curved hooks, placed at either end of the wound will act as tractors and raise the surface of the edges so as to enable a coaptation of the margins with ease, particularly if the tissue or skin is very flexible, as is the case with the eyelids or mucous membrane.

Skin Grafts

With the use of a Thiersch, split, or full-thickness graft, the period of convalescence is shortened considerably. It is an established procedure in extensive third degree burns; for abrasions that result in scars and contractures; and as a covering following the removal of various types of surface scars. As a covering, either a Thiersch or intermediate (a split graft) is used. A severe burn about the axilla, elbow, wrist, groin, popliteal space, or neck, should be covered with a skin graft; otherwise disfiguring contracture may result.

In preparing the donor site for a Thiersch, split, or full-thickness graft, the area is cleansed with ether, followed by soap and water, and ending with a weak solution of alcohol. *Chemical antiseptics are not used.* The favored donor sites are the inner thigh and abdomen. With the Padgett dermatome (see fig. 5), large sections of the skin can be removed from the thighs, abdomen, chest, and back. The bed that is to receive the graft should be clean and dry.

Following the excision of old granulations, pressure with warm, moist packs is made upon the bed until it is ready to receive the graft. An important step in the operation is to *suture the graft to the edges of the wound*, for normal tension, and to stab several areas of the graft, to allow for the escape or serum. A dressing of vaseline gauze, with three per cent xereform, is placed over the grafted and the donor areas. A deep-intermediate or full-thickness graft is placed upon a clean bed and not disturbed for from seven to ten days.

A full-thickness graft should be: (1) cut exactly to size; (2) equally adapted to the size of the wound; (3) maintained with even pressure over the graft and the edges of the wound of the recipient; and (4) immobilized. The advantages of a full-thickness graft can be obtained also with a three-quarter intermediate graft of from 0.022 to 0.028 inch thickness, cut with the Padgett dermatome.

Courtesy Kansas City Assemblage Co.
Fig. 5: The Padgett dermatome.

There are two schools of practice regarding postoperative care of skin grafting. Both use pressure dressings and mobilization, while one does not change the dressings for from seven to ten days, depending upon the thickness of the graft, and the other inspects the grafted area on the third postoperative day, if it is of Thiersch or split thickness, and on the fifth postoperative day if of full thickness.

From personal experience with skin grafting, I find that the postoperative care depends upon whether the wound that receives the graft is clean or contaminated. After excision of a scar that causes regional contracture, the wound is clean and a skin graft of medium or deep-intermediate thickness is sutured to the host, with pressure dressings and immobilization, and the dressing is not disturbed for from seven to ten days, unless a necrotic odor or temperature rise indicates partial or total loss of the graft.

Granulation and ulcer areas that do not close are covered with Thiersch or split-thickness grafts, over which are placed wet gauze dressings, wet cotton or marine sponges, and heavy roller bandages, and the part is splintered for immobilization. At least three times a day the dressings are saturated with boric acid or Dakin's solution and the

original dressing removed on the third postoperative day, and bi-daily thereafter until complete healing. A section of skin that is used for grafting is merely a culture medium until the bed and wound circumference of the host furnish it with a permanent blood supply. It is during the early period that daily inspection of the grafted area, excision of necrotic tissue, opening of blisters, and antiseptic therapy may save a part or all of a graft that would otherwise fail to take.

Doctor Gilles, of England, introduced the *pedicled-tube flap* during the last world war. He found that tubing the flap facilitated circulation and lessened the danger of infection. The usual technic is to make two parallel incisions about eight inches long, freely undermining the area, with immediate tubing of the flap.* The preferred technic is to create a shelf in the middle of the tube, make a shorter tube or, preferably, free about eighty percent of the flap to be raised, and then re-suture it back upon its original bed for from ten days to two weeks. When the sutures are removed, the entire flap is freed and tubed. This is called a delayed tube, and its chances for survival are increased. The flap can be raised near the defect or migrated from some other part of the body.

*Barsky, in his "Plastic Surgery" (W. B. Saunders Co., 1938), discusses this method fully, beginning on page 52.—Ed.

A patient suffering from extensive burns may have his life spared by sufficient covering with skin grafting. It is possible to cover six areas, each 4x7 inches at one operation, and to remove, after four weeks, a like amount of skin from the original donor areas. Whole blood or plasma transfusions, which are indicated in severe burns due to escape of serum, are likewise indicated, for the same reason, when extensive skin grafting is done.

Summary

1. Postoperative treatment with pressure dressings, immobilization, and tension support, facilitates healing by first intention and with satisfactory scar.

2. Exact surgical technic converts an ugly facial scar into a linear scar.

3. Skin grafting should be a daily practice, not only for its value as a covering to prevent and correct extremity, facial, and neck deformities, but also as a life-saving measure in extensive burns.

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59 E. Madison St.

Progress in Psychiatry

Treatment of Mental Disorders with Electric Shock

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The shock treatment of mental diseases is pretty well established, but the drugs used for that purpose are not always satisfactory. Dr. Reznikoff outlines the newest method for producing shock, which seems to have considerable possibilities.

DURING the past decade, important advances have taken place in the treatment of mental disorders. In 1933 Sakel[1] originated the so-called hypoglycemic insulin shock therapy. This was followed, in 1934, by Meduna[2] with the introduction of convulsive shock therapy, by the use of various drugs, especially Metrazol.

While shock therapy has been used on a purely empiric basis, it seemed clear to many clinicians that it was highly deemable to develop better methods and technic. Therefore, when Cerletti and Bini,[3,4] in 1937, substituted electricity, in place of chemical substances (Metrazol, camphor, Triazol, picrotoxin, coriamyrtin), for the induction of therapeutic convulsive seizures, research workers immediately turned to the study of the advantages and disadvantages that might result from this method.

The main disadvantages of Metrazol shock therapy consist of extreme fear and anxiety for this type of treatment;[5] and since Metrazol causes some sclerosis of veins at times, this complication presented a considerable obstacle to carry-

ing out complete courses of treatment, especially in obese women with narrow veins. Fairly frequent dislocations and fractures, particularly of the verebrae, also alarmed many clinicians.

Electric shock therapy eliminates some of these difficulties. With occasional rare exceptions, patients submit voluntarily to this method, especially after they have experienced one or two treatments, because they usually have complete amnesia. Anxiety and fear are observed only on rare occasions. Since generalized convulsions are somewhat milder and last a shorter time when induced by electricity, the possibility of fractures and dislocations is diminished, although by no means avoided.

Technic

Briefly, the method* consists of applying electrodes soaked in saline solution to both temporal regions, which are covered with electrode jello; an ordinary electric current is used and allowed to run for 0.1 second; in some cases it may be set to run 0.15, 0.2, or even 0.3 or 0.4 seconds, the optimum voltage being determined by trial with each patient. We usually start with 80 to 90 volts and gradually increase the dosage up to 150 volts. Measuring resistance before each treatment has been found of no value in determining voltage and seems to be unnecessary.

All degrees of reactions may be observed during the application of electric shock, ranging from slight flushing of the face, or pallor and blinking of the eyelids, with low voltage, to petit mal attacks, intermediate reactions, abortive grand mal attacks, and strong generalized convulsive seizures that look like epileptic grand mal attacks.

Apnea in some cases, following tonic and clonic spasms, becomes prolonged and at times looks alarming, but in all our cases consciousness returned without the application of artificial respiration. However, in exceptional cases, one should be ready to meet the emergency, having on hand such stimulants as Metrazol, Adrenalin (epinephrin), and caffeine-sodium benzoate; although, from studies of Brill and Kalinowsky,[6] it appears that one should resort to the application of mechanical means as soon as possible. To quote:

"It is felt that, in convulsive therapy, one should not wait until there is reason for alarm before intervening to end post-convulsive apneas. If respiration has not begun within a few seconds after the fit, it is probably desirable to assist the patient in terminating his anoxia as quickly as possible. The most favorable position for breathing is dorsal hyperextension, with the arms drawn up over the head to facilitate the initial movement inspiration. The simplest effective stimulus is a sharp extension, with turning of the head on the neck; this also seems to clear the airway. This procedure retains its effectiveness on repetition. When necessary, full artificial respiration, in the dorsal position, may be done according to the Silvester method."

The same *contraindications* that are considered against use of Metrazol convulsive treatment apply in the employment of electric shock — heart disease, tuberculosis, advanced arteriosclerosis, bone disease, and fever from any cause. Therefore, each patient selected for treatment with electric shock must have careful physical and neurologic examinations; a roentgram of the chest; an electrocardiogram; and urine, blood, and any other tests that might be indicated. Upon completion of treatment, another electrocardiogram is made on each patient.

Treatment is given three times a week. The usual course consists of from 8 to 12 generalized convulsive seizures; a few patients of the depressive type improved with less than 8 treatments. We prefer not to induce more than 15 generalized convulsive seizures in one course of treatment, because of reports in the literature[7] that rather lasting brain-wave changes may appear in electroencephalographic studies of patients who had an excessive number of induced convulsive seizures. Caution in this respect is especially warranted since, up to now, no adequate microscopic studies of brain tissues of patients who underwent electric shock treatment have been reported, obviously due to lack of material; a few reports of experimental investigation on animals seen inconclusive.

We have now treated with electric shock, at the Hudson County Hospital for Mental Diseases, more than 120 patients, all of whom suffered from the socalled psychogenic psychoses—manic depressive psychosis, involutional melancholia, and schizophrenia. A total of 2310 electric shock treatments were given, 1384 of which resulted in generalized convulsive seizures. Two patients received fractures of long bones. There were no deaths.

The best results have been obtained in agitated depressions and involutional

*Electric shock machine manufactured by Rham Instruments, Inc., was used in this work.

melancholia. In another paper[8] I summarized my experience with electric shock therapy in schizophrenia as follows:

"In schizophrenia, electric shock does not seem to produce permanent or lasting recovery; while amelioration of psychotic symptoms occurs in many patients, the essential schizophrenic pattern remains unchanged. Electric shock therapy may be utilized in preparing uncooperative, inaccessible schizophrenic patients for other therapeutic measures, such as occupational and recreational therapy and psychotherapy."

Approximately the same conclusions as to results have been published by other psychiatric hospitals. Glueck[9] reported the following results: Out of 40 manic depressive patients "65 percent made rapid, uneventful recoveries; another 30 percent were greatly improved; while 5 percent failed to respond. Of 10 patients with involutional psychosis, 70 percent made rapid recoveries, with another 10 percent improved, while 20 percent showed no change." His results in the treatment of 20 schizophrenics were poor.

Case Histories

A few brief case histories are presented below:

Case 1: J. F., a 36-year-old married machine operator, developed the idea that he had committed some unpardonable sin and was going to die; he stopped working, refused food, and complained that he had cancer and heart disease. Physical examination was entirely negative.

He was admitted to our hospital on August 22, 1941. Psychiatric examination revealed psychomotor retardation, difficulty in thinking, marked depression, and auditory hallucinations. A diagnosis of manic depressive psychosis, depressed phase, was made.

Six weeks later, when the preliminary work-up was completed and sufficient observation showed no improvement under routine custodial care, the patient was started on electric shock therapy. He received 11 treatments, 8 of which resulted in generalized convulsive seizures. He gained 23 pounds and mentally achieved complete remission. He was paroled on November 22, 1941, three months after his admission to the hospital and six weeks after electric shock therapy was instituted.

While the prognosis in manic depressive psychosis is generally considered good, in the past patients had to be hospitalized for from 6 to 12 months. Electric shock therapy helped, in this case, to shorten considerably the duration of mental illness and hospitalization.

Case 2: H. Z., A 42-year-old, single woman, had been admitted to our hospital on November 6, 1940. She was in the menopause, had many somatic complaints, refused to eat, kept walking back and forth, and told her relatives that she was going to die. During the psychiatric examination she appeared to be fearful, apprehensive and extremely restless; she expressed somatic delusions and ideas of guilt; emotionally, she was depressed. A diagnosis of involutional psychosis, melancholia, was made. Physical examination revealed malnutrition and some evidence of endocrine dyscrasia of thyro-pituitary type.

At first, permission for shock therapy was refused by the patient's family. Treatment with endocrine preparations failed to improve her mental condition. Four months later, permission for shock treatment was signed by her family and she was started on electric shock therapy on March 7, 1941. She was given 20 electric shock treatments, 8 of which resulted in generalized convulsive seizures.

This patient gained 13¼ pounds while under treatment. A month after treatment was started she was presented at the staff conference and appeared to be much improved. She was paroled on April 18, 1941, and is still in good mental health.

Case 3: G. B., A 28-year-old graduate nurse, developed a psychosis about January, 1941. She became disturbed and threatened to commit suicide and to kill members of her own family. During the psychiatric examination she was suspicious and evasive and manifested mannerisms, grimaces, emotional shallowness, and delusions of a sexual and paranoid nature; her sensorium was clear. A diagnosis of schizophrenia, paranoid type, was made. Physical examination was entirely negative.

She was given a course of electric shock therapy, consisting of 10 generalized convulsive seizures. There was no improvement when the treatment was completed. Later she was treated with insulin shock, but again there was no real improvement in her mental status and the following note was made by the ward physician: "Patient is manneristic and detached, extremely apathetic, almost completely preoccupied, living, to all intents and purposes, almost a vegetative existence."

Case 4: F. S., A 19-year-old single girl, was described, prior to the development of a psychosis, as extremely seclusive. She gradually became sulky, morose, antagonistic, extremely uncooperative, and evasive.

On admission to this hospital she imagined that she was St. Thelma and expressed delusions of a religious and erotic nature and hallucinations of hearing and vision. A diagnosis of schizophrenia, paranoid type, was made. Physical check-up revealed no organic pathoses.

She was treated with electric shock

and allowed to have 15 grand mal seizures. She gained 17 pounds in weight, but her mental condition was unimproved. This patient was later also treated with insulin shock, but failed to improve and is still hospitalized here.

Case 5: M. M. C., A 26-year-old married woman, had a baby girl, born in May, 1941. Ten days later she became psychotic: she was excited, made incoherent remarks, had a feeling that she was her own mother, and violently attacked her husband. She was committed to our hospital two weeks later.

On admission to the hospital she was excited and agitated, but later appeared bewildered and her excitement subsided. She became confused, manneristic, and preoccupied with autistic thinking; would seldom reply to questions, refused food, and began to maintain fixed postures; emotionally, she was shallow and indifferent. A diagnosis of schizophrenia, catatonic type, was made.

Three months after admission to the hospital there was no significant improvement in her mental status; while her behavior improved and she would eat her meals, she remained emotionally shallow, manneristic, unconcerned with things about her, and preocupied with autistic thinking.

The following notes were made by the ward physician after the second and third electric shock treatments: "A definite change was noted in this patient on Friday afternoon, following her second grand mal seizure, the result of electric shock therapy. She was more alert, appeared to be in contact with her surroundings, had lost the appearance of bewilderment which she had showed, and conversed intelligently and well. Following the visit of her relatives on Sunday, however, she reverted to her confused and bewildered state, showed some signs of cataleptic-like reaction and, when questioned, said, 'This is all so repetitious, I can't understand it. Why don't these people straighten themselves out?' She was somewhat tearful at this time. Today, following a third grand mal seizure, she is again alert, more in contact, and able to converse in a coherent and relevant manner."

She was allowed to have 10 generalized convulsive seizures and, when the treatment was completed, was presented at the staff conference, where the general opinion of the physicians was that she is in complete remission. She was paroled and gets along well at home.

Comment

Electric shock therapy is preferrable to Metrazol, because patients have less fear and anxiety for this treatment; it eliminates the difficulty of repeated intravenous injections; and patients have amnesia for the treatment.

In schizophrenia the results are not encouraging; the best results are obtained in patients with a psychosis of short duration, but relapses are frequent. In involutional melancholia and agitated depressions of middle life, recovery results, in spite of long duration of the psychosis, in about 80 percent of the cases. It helps to shorten the duration of hospitalization.

The treatment should not be regarded as specific. It is used on a purely empiric basis, and should be considered along with other forms of shock therapy (insulin, Metrazol) as adjunct to other methods of psychiatric treatment (occupational and recreational therapy, general psychiatric management, and psychotherapy).

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WISDOM

We should be careful to get out of an experience only the wisdom that is in it—and stop there; lest we be like the cat that sits down on the hot stove-lid. She will never sit down on a hot stove-lid again—and that is well; but also she will never sit down on a cold one any more.

—MARK TWAIN

Medical Motion Pictures and the War

By JOSEPH P. HACKEL, *New York City*
President, Medical Film Guild

IT IS to be expected that, in times of war, our first thoughts would be the implements of war, chief among which are the fighting men. So along with this must follow consideration of the needs for rehabilitation; first to repair the injured ones, and finally to clear the scars of battle.

Upon the medical profession, newly inducted into the armed forces, falls a tremendous responsibility. The doctor must prepare himself for an entirely different field of activity in the Army and the Navy, and yet keep abreast of modern medical practice towards the day when he will return to civilian life.

The need for education increases considerably because of these two-fold requirements. Having spent many years in training for the needs of the population, he finds a lack of information when confronted with military problems. This is being remedied slowly by the training division of the armed forces, because the urgent need is, first, to train the soldier and then the medical services in the arts of war, with secondary consideration given to maintaining his contact with civilian life.

Means must be found to prepare information quickly and transmit it immediately to hundreds of training centers. The value of an idea or activity to the armed forces is governed, very often, by the time element involved. Into this situation the medical motion picture comes as an ideal solution. It can be designed to meet the needs of any clinical, surgical, or hospital problem and, because of the portability of exhibition equipment, can be shown locally to hundreds of medical groups, simultaneously or in sequence.

The Army and Navy quickly realized the value of the motion picture for training purposes, and both services have built tremendous organizations to make teaching films. The list of required subjects is so large, and the problems so varied, that films on clinical and surgical practice have been left mainly to private initiative.

Months before the declaration of war, the necessity was foreseen for continuing the educational activities of the doctor transferred to the armed forces. A planned program of *Medical Films That Teach* was designed to meet the needs of the profession. Arranged entirely on a voluntary basis, credit should be given to those farsighted organizations which made this program possible as their contribution to the war effort. To expedite this work, a grant for education was provided which made available, at no charge, not only the films, but exhibition service as well. Thus, any medical officer whose responsibility it is to organize a medical meeting may have a modern teaching film, in sound and color, sent, with projectionist and sound projector, to his local station or hospital. The response to this offer has been enthusiastic. Nearly 75 forts, camps, naval bases, and veterans' hospitals have requested this service so far, and each has had repeated showings of films.

The program is far-reaching. Important subjects are selected, which have a bearing on the war effort and yet maintain a close relationship to the teaching requirements of the medical school or medical society. Simultaneously, under this plan, the same programs are obtainable by hospitals and local medical societies all over the country. When the war is over, medical motion pictures will become an important part of the teaching facilities of medical schools and other groups.

In spite of the load on all educational activities due to the war effort, there is a definite trend toward a greater and more efficient use of the motion picture for teaching. Nearly every government department which must relay a message to the public or some professional group uses the film to disseminate its information. Do you wish to learn how to file a piece of steel flat, or turn a cylindrical piece of steel on centers? There are dozens of films on such subjects. Need any information on water power, agriculture, animal husbandry, or public health? Write to the proper division in Washington and you may have it. But when it comes to the strictly specialized problem of films for the medical profession, private initiative is still the motivating force. Perhaps, it is because the teaching of medicine is so highly individualized.

The United States Government, attempting to maintain friendly relations with other governments, has realized that the medical profession in Central and South America exercises a powerful influence on political and social life. In its desire to maintain good will with the doctors in Latin America, this Government has discovered that a teaching film program is one sure method of building up a lasting friendship.

This has been an extremely difficult assignment, not because of the scarcity of medical films, but for the fact that most films are simple routine studies of a specialized nature, which would appeal to only a limited group.

Films intended for distribution in South America must be designed to appeal to the general practitioner, and yet be specific enough for the needs of the specialist. The technic I have evolved, for which I coined the phrase, "Motion Picture Film Textbook," has satisfactorily solved the problem in this country. With slight modifications, such as rerecording in the Latin tongues, these subjects can be used effectively in South America.

One needs only to attend a medical convention where Latin-American doctors congregate, to discover a strong demand for motion picture films and other educational material. It is my prediction that, when the war is over, this country will become the training center for the medical profession in South America.

167 West 57th St.

THE PURPOSE OF ADVERSITY

The compensations of calamity are made apparent to the understanding, after long intervals of time. A fever, a mutilation, a cruel disappointment, a loss of wealth, a loss of friends, seems at the moment unpaid loss, and unpayable. But the sure years reveal the deep remedial force that underlies all facts. The death of a dear friend, wife, brother, lover, later assumes the aspect of a guide or genius, for it commonly operates revolutions in our way of life, terminates an epoch of infancy or of youth which was waiting to be closed, breaks up a wonted occupation, or a household, or style of living, and allows the formation of new ones more friendly to the growth of character. It permits or constrains the formation of new acquaintances and the reception of new influences that prove of the first importance to the next years; and the man or woman who would have remained a sunny garden-flower, with no room for its roots and too much sunshine for its head, by the falling of the walls and the neglect of the gardener, is made the banyan of the forest, yielding shade and fruit to wide neighborhoods of men.—EMERSON.

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CIVILIZATION IS PERMANENT

Civilization, by now, has become the spiritual blood of vast portions of human kind, without which it cannot live. Depression, yes, but not destruction. And when, eventually, the skies clear again, there may well be expected a spiritual rebound that will compensate for the losses.—DR. ALES HRDLICKA, *Curator of Physical Anthropology, U. S. National Museum, in* Think.

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FEAR

Fear is an entirely normal reaction, and there are few individuals who are "fearless," in spite of their claims to that distinction. It is not fear itself, but the reaction to fear, that counts; *the brave proceed to fight, whereas the cowardly exaggerate their fears and become panic stricken. The former have a chance for survival; the latter wait only for death or some other form of release.*—Bull. Am. Soc. for Control of Cancer.

A LIVING FOR THE DOCTOR

THE BUSINESS OF MEDICINE AND THE ART OF LIVING

First Aid by Laymen: Legal Aspects*

1. In the case of an accident, is a bystander required by law to give first aid?

These persons are required to assist in such care: Physicians, nurses, school teachers (for children under their care), school bus drivers, and the driver of a car which participates in an accident (even though the driver is not responsible for the accident). The trained first aid worker, although not legally bound, should give assistance. No person should be hesitant in doing his best to help with the injured, unless he feels that he might cause injury or does not know what to do.

2. If a bystander at the scene of an accident renders assistance, can he be held liable for injury suffered due to incorrect care given?

If the firstaider uses reasonable care and judgment, he would not be liable for any injury or damage; but if he performed his acts negligently or carelessly, he could be held to respond in damages. He must exercise such care as a reasonably prudent person would use considering the circumstances, such as the injury itself, the situation of the emergency, the training of the firstaider, etc. It is probable that a jury might expect a higher standard of care from a trained firstaider than from an untrained person. A physician, though only offering his services as a firstaid volunteer and not intending to charge for his services, would be held to the same degree of care as if he were treating his own patients.

3. If a person, in rendering first aid, initiates action resulting in expenses for care, can he be held responsible for the payment if the injured person refuses to pay?

Yes. The firstaider should explain, *in advance*, when ordering service for the victim, that he is acting only as a volunteer and is not otherwise related to or interested in the person concerned.

4. Must an accident victim be left lying immediately at the scene of the accident until the police or the coroner have arrived?

When the victim is living, the firstaider may at once give such attention as reasonably seems indicated for the preservation of life or limb. If the victim is dead, the body should not be moved, nor should possessions on or about the body be removed.

5. Should police authorities be notified?

It is the law in many states that either the city police or the county sheriff's office be notified by the driver of a vehicle involved in an accident. When a driver collides with an unattended vehicle, he should locate the owner or report the damage to a police officer. If he damages fixtures which are legally on or adjacent to a highway, he is required to take reasonable steps to notify the owner or person in charge of the property.

A driver involved in an accident is required to give his name, address, and vehicle registration number, and to show his driver's license, if requested to do so by the driver of the other vehicle or the owner of damaged property.

Physicians are required to report all cases in which gunshot wounds are treated. Garages and repair shops are required to report to the local police and the highway commissioner when incoming motor vehicles give evidence of having been struck with a bullet.

6. Suppose a seriously injured victim refuses an offer of first aid?

A refusal by a competent person (one who knows where he is and what has happened) must be respected, or the firstaider may face serious legal difficulties. It is legally proper, however, to prevent suicide, by any means.

Difficulty may arise with children, drunken persons, old persons, and those who are disoriented (don't know where they are or what is going on). *Life-saving measures only* should be carried out. In extreme emergency, such as bomb-

Minnesota Medicine, June, 1942.

ing, there would probably be no legal responsibility entailed in removing injured persons.

C. J. POTTHOFF, M.D., Associate Professor of Preventive Medicine, University of Minnesota.
PAUL CARROLL, Judge, District Court.
Minneapolis, Minn.

◆

Realities

It is an uncertain age in which we live. Tomorrow is a mystery to us all. With war invading every portion of the globe, no one is secure and few are undisturbed.

Yet life goes on. In spite of the war, children are being born and their future planned, books are being written and music composed. There is work to be done, and there are truths that cannot be destroyed.

We must teach our children to believe in decency, to fight for liberty, to respect the rights of other men, to live and work in harmony with their neighbors. They must be taught realities, but they must understand that honor is a reality no less than war.

In a world of turmoil we should remind ourselves that character and integrity are enduring, that beauty and dignity will survive all wars, that fairness and kindness and consideration are indestructible.—*Scully-Walton Magazine.*

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A Doctor's Secretary

A prominent physician in Chicago recently lost his secretary by death, which came quite unexpectedly. We knew this lady, and we know her employer well enough so that he showed us the telegram he sent to her brother, which was so unusual a tribute that we asked and received permission to present it to our readers anonymously, as we believe they will be glad to see what a secretary can mean to the doctor in whose service she spends her life and to the patients with whom she comes in contact.

Here is the telegram:

I have lost a friend. She was not only my friend, but the friend of everyone with whom she came in contact.

Hers was a modest place in the world. She was a doctor's secretary and receptionist, endowed with the intuitive insight into human nature, the kind of self-knowledge that served as a key to understanding others. All her friends expressed her giving with intensified sympathy; she made the discouraged and the depressed feel refreshed and re-invigorated. Rich or poor, patient or peddler, doctor or detail man, her smile and a word had that ineffable quality that made him her friend. Her Christmas remembrances might well make a movie actress jealous, and even the doctor's mail from patients far and near, from high and low, from the most polite to the worst grouch, consistently carried a word of greeting to this gracious lady.

Her last deliberate act was designed to save her doctor any disturbance to his routine.

She has gone to her reward. All the benediction she needs is the prayer that she will be received with a grace equal to that she always showed others.

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The Problem of the Snowflakes and the City Bylaw

The sidewalk was buried in snow, beautiful snow, the policeman waded through it, and arrived at Doctor Medico's door out of breath and temper.

"Get your little shovel and hustle that snow off'a that sidewalk inside of half an hour, or I'll have you down to the Police Court," the policeman ordered.

"What charge'll you lay against me?" queried Doctor Medico. "Selling iron pills without a license?"

"This is no joke," was the reply, "for there's a city ordinance that calls on every property owner with buildings fronting on a public street to keep the sidewalk on his front clear of snow, and if he don't he's liable to a fine of $50."

"You go chase yourself, you and your city ordinance!" "And the policeman left vowing that he would make it a "warm job" for the luckless doctor.

"Can the city make me shovel snow if I don't want to?" Doctor Medico telephoned to Judge Enright, before the policeman was out of sight.

"Better get your shovel and get to work before he comes back," the Judge advised, "as the point has never yet been before our state courts. In Connecticut, Massachusetts, Montana, Missouri, New York, and Rhode Island, the courts have held that an ordinance like this is lawful and that anyone disobeying it may be fined."

"That looks as if I were in for it."

"On the other hand," Judge Enright went on, "the courts of Illinois, New Hampshire, and the District of Columbia have held that such an ordinance is unlawful, so it is impossible to say what our courts would do when the point came

up here, as it will sooner or later."

"What's your opinion?"

"I should say that our courts would follow the Massachusetts and the New York Courts," was the reply, "but as I am just giving a guess you might fight the city and win, or you might get stung $50 and costs. Of course, as I said before, if you want to make a test case of it and put up $100 I'll. . ."

But Doctor Medico had hung up the receiver, and was hustling out to the storeroom where he kept his snow shovel. M.C.H.

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Gasoline and Tire Rationing

Physicians who actually and necessarily need more than the basic ration of tires and gasoline will have no trouble in getting special ration cards, but for patriotic reasons and for the sake of the effect upon the general public, no physician should abuse this privilege.

In figuring essential professional mileage, travel between home and office is *not* included, so specialists who do all their work in offices are not eligible for preferential treatment.

Physicians who receive the B or C ration books should set a good example by scrupulously abstaining from using them for any type of "pleasure driving" or for any driving that people might be apt to consider nonessential, and by turning back any unused coupons if they find that their requirements have been less than they had estimated. Moreover, they should steadily observe the 35 mile speed limit, except in cases of *real* emergency, in spite of the fact that they could "get away with it."

Those who, after receiving a ration for making private calls, are appointed to an institution where this is no longer necessary, should surrender this privilege.—JOHN C. RICHARDS, Chief Gasoline Rationing Branch, Office of Price Administration, in *J.A.M.A.* Oct. 31, 1942.

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Prevention of Malpractice Suits

The causes of a malpractice suit, especially one connected with the use of x-rays, are one or more of the following: (1) Carelessness or negligence on your part or on the part of your assistants, technicians, nurses, or office girls; (2) incompetence, especially from excessive exposure of the patient during fluroscopy (such exposure can be prevented by staying in the dark room for from ten to twenty minutes before beginning the examination); (3) excessive doses of x-ray therapy (signal lights or an automatic clock should indicate when treatments are over); (4) a false impression, given to patient or family, at the beginning of treatment; and (5) the desire to escape payment of the bill for services rendered.

It is well known that all patients do not get well and that there is a considerable variation in results obtained by good treatment. Even those who recover from the disease for which they are treated may not have their tissues fully restored to normal. A frank discussion of the possible or probable outcome, with the patient or some member of the family, *in the presence of witnesses*, is an important precaution.

The difficulty about getting bills paid, which is the cause of some malpractice suits, can be avoided by having a definite understanding at the time of beginning treatment, or by having payments made in cash, or at least by requiring payment during the time of rendering service.—G. E. PFAHLER, M.D., in *Radiol.*, July, 1942.

BOOKS

PHYSICIAN'S DAILY RECORD

Kersten

THE PHYSICIAN'S DAILY RECORD. *1943. Published by the Kersten Publishing Company, Fort Dodge, Iowa.*

Of the various methods of keeping a physician's daily records of charges against patients, amounts paid by them, expenses and income for income tax purposes, none is more practical than the Kersten. It is bound in tough leather covers, which withstand wear well. The 22 round rings keep the pages flat so that they can be written on easily, yet prevent tearing out of sheets or their loss.

Each day in the year has its separate page for data, including the hour of the call, which may be important in injury cases or severely ill patients who are seen several times during the same day.

At the end of each month's pages, there is a section for monthly summary of business, for narcotics dispensed, and for inoculations and surgical procedures. Similar sections are found at the end of the book, for summarizing the year's work. Additional sheets are provided for notifiable diseases and brief obstetric records.

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Packaged Facts

There's a vast difference between having a carload of miscellaneous facts sloshing around loose in your head and getting all mixed up in transit, and carrying the same assortment boxed and crated for convenient handling and immediate delivery.—LORIMER.

CLINICAL NOTES and ABSTRACTS

Microfilm copies of any of the published papers here abstracted, up to 25 pages, may be obtained for 25 cents from Microfilm Service, Army Medical Library, Washington, D.C.

The Stader Splint

A NUMBER of years ago, a veterinarian, Dr. Otto Stader, of Geneva, Illinois, devised a splint that could be used successfully in setting and retaining fractured bones in small animals. He even used it once on a horse, and it worked!

Six years later (in 1937), Drs. Kenneth M. Lewis and Lester Breidenbach, of New York University College of Medicine and in charge of fracture work at Bellevue Hospital, saw Dr. Stader put one of his splints on a police dog, and next day saw the dog dashing about the kennel. A study of the splint convinced them that it could be adapted to human bones, and Dr. Stader set about the laborious job of making such adaptations, which the two surgeons tested on broken bones in the autopsy room.

A few months later the splint was used on a man with a bad fracture of his right tibia. He was kept in bed for 10 days, at the end of which he walked up and down stairs with ease — the splint, of course, being in place. A few days later he went to work at a new job.

Another young man, a baker, broke his left tibia and fibula; but a week after the applicatian of a Stader splint he was back at work, standing eight hours a day at his ovens, with the apparatus hidden by his trouser leg.

In spite of these successes, conservative Drs. Lewis and Breidenbach waited five years before reporting this work, in *Annals of Surgery* for October, 1942.

The day after Pearl Harbor, Dr. Stader took one of his splints to the Philadelphia Naval Hospital where, after careful study and several trials, it was adopted, and the entire output of the instrument company that makes them is now reserved for the armed services until the end of the war, when civilians will have a chance at them.

It is now common to see men with broken legs walking, without pain, 48 hours or so after the splint is applied; men with broken arms carrying heavy suitcases; and men with broken mandibles (if the teeth articulate properly and the soft tissues are not lacerated) talking, eating, and chewing tobacco after similar brief periods.

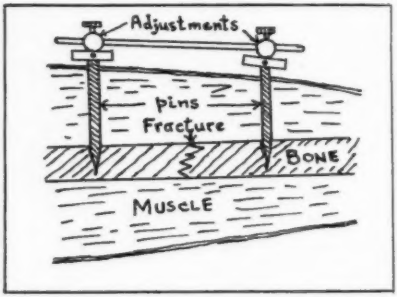

Fig. 1: Rough sketch showing general principles of the Stader splint.

The general principle of the Stader splint is to imbed a stainless steel post in the bone on each side of the line of fracture and connect them with a light, but strong, bar, which is manipulated by various toggles and screws that assist in reducing the fracture and then immobilize it. The splint is said to be able to bear any strain that could be supported by the normal bone. A rough diagram of the principle of the splint is shown in Fig. 1.

This device, when released for general use, bids fair to revolutionize the treatment of a high percentage of all fracture cases. —*Science News Letter*, Nov. 14, 1942, page 310.

The Kenny Treatment of Infantile Paralysis During the Acute Stage

Miss Elizabeth Kenny, an Australian nurse, believes that the clinical picture of infantile paralysis is the opposite of that generally accepted. It is her conviction that pain and muscle spasm are the basic factors in the disease entity. Thus the muscles which we call flaccid or paralyzed are, in all probability, merely stretched from their normal resting positions by the abnormal condition of spasm in the primarily affected muscles. Treatment is, therefore, aimed at the *abolition of pain and muscle spasm*, and this is primarily accomplished by hot fomentations and proper rest positions, without the use of splints. These measures have the tremendous advantage of immediate applicability and treatment is begun during the quarantine period, regardless of whether the patient is at home or in a hospital. Finally, after the acute stages of discomfort have passed, a new system of muscle re-education is introduced.

Results: There is no doubt that Miss Kenny's treatment abolishes pain and stiffness and minimizes the occurrence of deformities. It prevents contractures, lessens the degree of paralysis, and, by treating the symptoms which appear in the acute stage, procures a higher percentage of full recovery than any other method. Gross deformities either do not occur or are minimal. Undesirable visceral disturbances are not evident. Contractures are absent. — PHILIP LEWIN, in *Ill. Med. J.*, April, 1942.

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Continuous Caudal Anesthesia in Labor

In 33 obstetric patients given continuous caudal anesthesia, there was prompt and complete relief of pain and relaxation of the cervix and pelvic floor, and the patients cooperated fully in the labor. The low application of forceps and postnatal suturing were also painless.

All of the infants except one (a stillbirth) breathed spontaneously and at once. The mothers had no delirium, narcosis, cyanosis, nausea, vomiting, anoxia, or other unfavorable symptoms.

Technic

In the knee-chest or side position, a wheal is raised over the sacral hiatus with a local anesthetic; through it a special, malleable, caudal needle is inserted into the sacral canal from 5 to 7 cm., and the rigid rubber tubing of a Lemmon continuous spinal apparatus is attached to the hub of the needle, which is fastened to the median raphe, just below the hiatus, with adhesive, after which the patient can turn on her back.

The initial dose of 30 cc. of a 1.5 percent solution of Metycaine (Lilly) in physiologic saline is injected into the sacral canal in one minute, and the anesthesia is continued by injecting, with a continuous-flow, 5-cc. syringe (including the necessary apparatus), about 20 cc. of the solution every 30 to 40 minutes, or more often, as the individual case requires.

One labor lasted 13 hours and another 12 hours. The average length was 4¾ hours.—DRS. WALDO B. EDWARDS and ROBERT A. HINGSON, in *A. J. Surg.*, Sept., 1942, p. 459.

◆

Use and Abuse of the Sulfonamides

In treating mild infections, especially those involving the urinary tract, we are likely to forget that as little as 30 to 45 grains (2 to 3 Gm.), administered daily, in divided doses, to an adult person, will usually give as satisfactory results as will larger doses of the sulfonamides.

In infections of moderate severity, such as pneumonia, and of marked severity, as bacteremia and meningitis, it is necessary to use large doses of the drug initially, in order to obtain a sufficiently high concentration of the drug in the body to control the infection before the bacteria have multiplied excessively. The first doses must be large and then the effect can be maintained by small daily doses.

Do not wait until all diagnostic steps are complete before starting treatment; continue the use of the sulfonamide until complete recovery has occured, or relapse will take place; see that the patient passes one and one-half quarts (1,500 cc.) of urine daily.—A. E. BROWN, M. D., in *Minn. Med.* Nov., 1942.

◆

Cyanosis in the Newborn

Any newborn infant with cyanosis and dyspnea should have lateral and anteroposterior roentgenograms of the chest taken. Air may be demonstrated in the mediastinum, just beneath the sternum, which can be aspirated by passing a 21-gage needle through the third left interspace just to the left of the sternum. Removal of the air promptly relieves the cyanosis and dyspnea. Small amounts of air need no treatment, except stimulants and oxygen by inhalation.—B. GUMBINER, M.D., in *J.A.M.A.*, Dec. 13, 1941.

Oxygen in Pneumonia

Because of the success of chemotherapy, many physicians have stopped using oxygen therapy in pneumonia. It is not always possible to foresee which patients will not respond to chemotherapy, and it is these patients who should receive oxygen as soon as possible, especially if there be extensive pulmonary consolidation, as in "virus" pneumonia. Should a great influenza epidemic strike, we should be prepared to deal with large numbers of such cases of pneumonia. The early diagnosis of atypical consolidation may be difficult because of the lack of physical signs of that condition.— W. B. BOOTHBY, M.D., in *Arch. Phys. Ther.*, Oct., 1942.

◆

Ambidextrous Gloves

Hitherto, if a surgeon's glove was nicked in an operation, the *pair* was spoiled. Now the Pioneer Rubber Co. is making ambidextrous gloves, which they call *Conservors* (see Fig. 1), any two of which make a pair.

Courtesy Pioneer Rubber Co.

Fig. 1: "Conservor" ambidextrous glove.

It is claimed that these gloves give the surgeon perfect comfort and freedom in operating; that they are tough and durable; and that three sizes will fit practically every operating hand.

This will be good news for all hospitals, large and small.

◆

Yellow Fever Vaccination Now Safe

Full information about the development of jaundice in 28,585 men vaccinated against yellow fever, with 62 deaths, has now been released, and all these cases occurred in those vaccinated with certain batches of vaccine made from chick embryo pulp suspended in normal human blood serum.

Since April 15, 1942, all yellow fever vaccine has been made with water instead of serum, and has proved to be quite safe.—*Science News Letter*, Aug. 8, 1942.

New Cancer Theory

A new theory of the cause of stomach cancer was presented by Dr. Frank Apperly, of the Medical College of Virginia, at the recent meeting of the Southern Medical Association.

Dr. Apperly suggests that stomach cancer (and perhaps cancer in other localities) may be due to deficiency of vitamins A and D together, because the mortality rate in Canada and the United States grows less where the amount of sunlight increases, and among people who are exposed to the sun in their daily work; because rats and dogs on an adequate diet, but kept in the dark, develop abnormalities of the digestive mucosa; and because giving vitamins A and D diminishes the number of tumors developing in cancer-susceptible white mice.

He thinks that lack of sunlight (or vitamin D) may interfere with the absorption from the intestine of calcium, phosphates, or other substances necessary to cellular metabolism.—*Science News Letter*, Nov. 21, 1942.

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Hearing Aids Today

There is no doubt that hearing aids will be improved in years to come, but right now the vast majority of deaf people can hear tomorrow if they can and will pay the price of a properly-fitted apparatus of this type. They need not wait for the improvements that are to come.

The carbon type instruments are as obsolete as a Model-T Ford, but almost any one of the vacuum tube instruments will give long, continuous, and satisfying service with little or no attention except renewal of the batteries.—JOSEPHINE B. TIMBERLAKE, in *Volta Review*, Oct., 1942.

◆

Newer Therapy of Acne Vulgaris

Small doses of thyroid extract are of value in treating many patients with acne. The clinical response must be used as a guide to dosage, as in this condition the basal metabolic determination may be normal.

Nicotinic acid (niacin), in doses of 50 mg. twice daily for two months, will result in marked benefit in one-half of these cases.

Injections of liver extract, subcutaneously, in doses of 5 units weekly, are often effective. —A. W. STILLIANS, M. D., in *Miss. V. Med. J.*, Sept., 1942.

"Mucous Colitis" or "Irritable Colon"

Mucous colitis is not a disease, but a condition which the individual will always have. It is usually neurogenic in origin, although often it is the result of irritation, either in the gastrointestinal tract or in organs adjacent. While not critically ill, these patients are really sick, because of their anxiety. *The pain of a spastic, irritable colon can simulate the pain associated with disease of any organ of the abdomen.*

Symptoms: Excessive "gas" with belching, colicky pains in the abdomen, constipation, and abdominal distention.

Signs: The patient is usually asthenic, undernourished, and nervous. The colon, especally the sigmoid, is palpable, cord-like, and tender. The cecum is often distended and tender (which does *not* make a diagnosis of "chronic appendicitis"). The stools are usually hard masses or ribbon-like, and covered with mucus.

A complete, carefully-taken history may uncover symptoms of other disease processes, a history of cascara and phenolphthalein self-medication, or possible allergic tendencies.

Treatment: Sufficient sedatives should be given so that sleep is easily obtained. If nervousness is extreme, sodium bromide may be given, with elixir of phenobarital. The sedative and antispasmodic (atropine, belladonna, or newer synthetic drug) medication should be given before each meal and, after improvement, should be kept on hand in case of the usual relapses — about which the patient should be warned. Mineral oil is a non-irritating laxative. —C. W. McGavran, M.D., in *J.A.M.A.*, Sept. 19, 1942.

◆

Vitamin C in Peptic Ulcer

It appears from published studies that many patients having peptic ulcer are deficient in vitamin C and that this substance, obtained either from foods, preferably juices high in vitamin content, or as the crystalline material, should be administered in treatment. The significance of vitamin therapy in the peptic ulcer regimen, with fractions other than ascorbic acid, is not well defined, although Field *et al*, suggest that thiamin (B_1) deficiency, as well as alkalosis, may be a cause of anorexia in ulcer patients receiving intensive alkali therapy.—*Physician's Bull., Nov-Dec., 1942.*

Contraception and Abortions

In England, as facilities for contraceptive advice have become more widespread, we noticed a progressive diminution in the number of illegal operations among our patients.

Contraceptive knowledge, like all other knowledge, may be used for evil as well as for good, for antisocial as well as for social ends; but, at its worst, it will do the community less harm than the prevalence of illegal operations, with their attendant risks. — Norman Haire, M.B., Ch.M., in *The General Practitioner*, May, 1941 (through *Birth Control News*, Oct., 1942.)

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Prevention and Treatment of Pulmonary Embolism

An operation in which the patient has weathered all other hazards; a fracture that is healing satisfactorily; a puerperium in which all appears to go well; a thrombophlebitis in which the patient is well on the way to recovery; even a minor sprain or bruise may be the setting for death from pulmonary embolism. For every fatal attack there occur two or three nonfatal seizures, attended by grave apprehension for the patient's life; meanwhile the physician looks on, distressingly limited in his power to prevent a subsequent recurrence.

Prevention: The patient's legs should be kept warm during the operation or delivery transfer to his room, and after his return to bed. The Trendelenburg position should be used for 24 hours after operation or delivery (the foot of the bed may be raised on blocks), to prevent venous congestion in the legs and incidentally to diminish the pulmonary infections. The legs should be massaged frequently during the first 48 hours and twice daily until the patient is out of bed. Passive and active exercises of the legs should be required daily. Tight abdominal binders and dressings must be avoided. This routine is especially valuable for patients of more than 40 years; those who are obese; and those suspected of having some circulatory defect. The removal of a non-ruptured appendix is never followed by pulmonary embolism, so this routine is unnecessary for this type of operation.

Treatment: The *intravenous* injection of ½ gr. (0.032 Gm.) of papaverine hydrochloride should be started at once. Atropine sulphate 1/100 gr. (0.65 mg.) is then given *slowly*, intravenously. Oxygen should be given steadily.—A. R. Barnes, M.D., in *West J. Surg.*, Nov., 1942.

Heparin and Decoumarin

Heparin is used in mesenteric thrombosis; thrombosis of the central retinal vein; or *pulmonary embolus* following operation or illness.

Dicoumarin is used in early treatment of acute, chronic, or recurrent thrombophlebitis, arteriosclerosis obliterans, and thrombo-angiitis obliterans.

DRUG	METHOD	EFFECTS	DOSE
Heparin	Intravenous only	Immediate; last from 1 to 4 hours	Inject about 20 mg. per kilo of body weight; repeat as required
Dicoumarin	By mouth (may use intravenous)	Delayed (24 to 72 hours); last, average, 11 days	From 200 to 300 mg., by mouth, every other day, in average case

If purpura, ecchymoses, hematuria, or other hemorrhagic manifestations appear, they should be checked by blood transfusions. When either substance is being used, repeated estimates of the bleeding and clotting times and the prothrombin levels in the blood must be made.—A. PRANDONI, M.D., in *Bull. N. Y. Acad. Med.*, July, 1942.

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Present-Day Treatment of Diabetes

The clinician has 3 instrumentalities for the treatment of diabetic patients: (1) diet, (2) insulin, and (3) exercise. The results of treatment depend largely on the balanced application of these three agents.

The effect of crystalline insulin does not endure beyond 8 hours. Protamine zinc-insulin's effect is as follows: Ten (10) percent is released during the first 4 hours after injection; 20 percent becomes available during the next 6 hours; 30 percent during the next 4 hours; and 30 percent during the next 10 hours, leaving 10 percent still available after 24 hours.

It must be remembered that the additional 10 percent is thus added to the *next morning's dose*, thus making 20 percent available on the second and successive mornings. If an attempt is made to overcome glycosuria in the early part of the day by adding more protamine insulin when the evening urine is sugar-free, the patient may have nocturnal hypoglycemia ("insulin-shock").

Diabetic children do best on regular insulin, which can be readily adjusted to their fluctuations.

Insulin injections should be given by a charted sequence, so that no site is employed again until 4 weeks have passed. The best syringe is one of 1 cc. capacity with a scale of 10 subdivisions and without numerals or units.—L. J. PALMER, M.D., in *Northw. Med.*, Nov. 1941.

The Fever and X-Ray Treatment of Cancer

Fever has a destructive effect on tumor cells. When artificially induced fever treatments are given, together with x-ray therapy, dramatic results have been obtained in 75 percent of a group of patients with far-advanced, inoperable cancers of the cervix, breast, bladder, prostate, and bone. *Two patients with osteogenic sarcoma are clinically healed, and are working.* The treatment with roentgen rays is given immediately following the fever treatment, while a high fever is still present. Apparently, a high body temperature makes the tumor cells more susceptible to the destructive influence of the x-rays.—H. S. SHOULDERS, M. D., and E. L. TURNER, M. D., in *South Med. J.* Nov., 1942.

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Bismarsen in Lupus Erythematosus

Bismarsen may prove to be of value in the treatment of discoid lupus erythematosus, although our data, based on the management of 28 patients, is insufficient to make definite conclusions possible.

Of our 28 patients, 12 showed improvement, 8 showed decided improvement and 3, moderate improvement. Actually 14 individuals of the group made apparent recoveries. The lesions disappeared completely, often leaving atrophy, but without evidence of any active inflammatory process.

The doses were as follows: The tolerance of the patient was tested by giving 0.05 Gm. of the drug twice weekly for one week; then 0.1 Gm. of the drug twice weekly; and in many cases, if it was well tolerated, the dose was raised to 0.2 Gm. twice weekly. All injections were given intramuscularly.—DR. RICHARD S. WEISS, ADOLPH H. CONRAD, and RICHARD O. PFAFF, in *Archi. Derm. and Syphil.*, Dec., 1942.

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The Dosage of Morphine

Pain and analgesic medication may be considered as balancing factors. *The greater the pain, the greater the amount of morphine that may be safely given.* John B. Deaver expressed this thought forcefully, many years ago, when he said, "The proper dose of morphine is *enough.*"

It shows good clinical judgment to *individualize* the amount of a drug to the patient and the condition to be treated. Coronary thrombosis is rarely relieved by less than ½ gr. (32 mg.) of morphine, for example; yet many painful conditions are relieved by ⅛ gr. (8 mg.). The most accurate method of giving quick relief and also of gaging the proper amount of medication is to dissolve the ½ gr. of morphine in 2 cc. of distilled water and inject it *slowly, intravenously.* When the patient's pain stops, as it will while the needle is still in the vein, the proper dose has been given. This avoids the necessity of repeated hypodermic injections, which require at least one-half hour to take effect and have the danger of overdosing and morphine poisoning.

R. L. GORRELL, M.D.

Clarion, Ia.

MEDICO-MILITARY NOTES

Enlisted Nurses

There are not enough trained nurses to supply the armed forces, to say nothing of keeping the civilian hospials going, so Miss Terry Pullig, a pre-medical instructor at Louisiana State University, has come forward with a plan to take up the slack.

Since much of the time-consuming work of nursing does not call for the extensive training of a registered nurse, Miss Pullig suggests that healthy young single women who have a taste for that sort of thing might be enlisted as *auxiliary nurses* — high school graduates would be privates; those with two years of college work, privates first class; and college graduates, corporals. They would then be given an intensive, three-months theoretic and practical course in the basic subjects, in selected h o s p i t a l s, after which they would be assigned to various base, evacuation, and other hospitals, where their numbers would be in a fixed relation to those of the trained nurses, from whose shoulders they could take a tremendous load.

This plan has not been adopted—in fact, its details have not been fully worked out—but it appears to offer a reasonable way out of a distressing state of affairs, for which no other sound remedy has been found so far.

Those who are interested in this idea can obtain further information from the Louisiana State University News Bureau, Baton Rouge, La.

Young Physicians Needed

The Army needs *young* physicians (under 45 years), who can serve with troops. Doctors past 45 are needed to take care of the folks at home, unless there is some special assignment that some particular individual can fill better than anyone else.

The only official way to volunteer is to make *one* application for a commission (not duplicates) on the regular War Department forms. Do *not* go to Washington to talk to someone about it, nor write to Congressmen or other influential persons, as these men are *busy.*

Doctors who volunteered in 1940 and early in 1941 must be promoted, so those who come in now should not expect initial appointments in the higher grades.

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Airsickness

Airsickness, in most student fliers during acrobatics, is caused by their poor orientation in space, and can ordinarily be overcome when a student becomes oriented in the air by using his eyes to pick up points of reference on the ground, instead of watching the instruments in the cockpit.

An airsick pilot should not attempt to land, but should fly level, at a reasonable altitude, until the sickness has subsided — Lieut. T. T. FLAHERTY, U.S.N. Med Corps in *U. S. Med. Bull.*, through *Sci. News Letter*, Aug. 22, 1942.

Bandaging in Compression Shock

When an arm or leg has been pinned under a beam or other heavy object for some hours, the patient frequently goes into shock soon after being released. This can be prevented by the use, immediately after the pressure has been removed, of an elastic web bandage, applied from below upward, with such a degree of tension that it is stretched to *double its unstretched length.* — DRS. H. D. PATEY and J. D. ROBERTSON, in *Brit. M. J.*, Aug. 22, 1942.

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Doctors and Medical Students

Dean J. Roscoe Miller, of Northwestern University Medical School, is quoted* as predicting that all able-bodied physicians in the country, less than 50 years old, will be needed for service with the armed forces, and that, in order to make up the deficit of doctors to care for the civilian population, high school graduates may be permitted to enter medical schools without the college work now required.

Paul G. Armstrong, Illinois selective service director, warned that all physicians of military age, who have no dependents or other reasons for deferment and who do not apply for commissions, are liable to be drafted as privates and may have some trouble in getting commissions after that.

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The Army Doctor

The lot of the medical man assigned to the armed forces of his country is never a happy one. He does not see much of the glamor of combat and never has a chance to get "fighting mad," but he does have to deal with the backwash. As so well put by Philip Gibbs, he deals largely with "blood and mud."— URBAN MAES. M. D., in *Tri-State Med. J.*, Nov., 1942.

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Medical Administrative School Doubles Classes

The Medical Administrative Corps Officers Candidate School, at Camp Barkeley, Tex., will have classes twice the previous size at its sessions beginning September 26. This action has been taken to expedite the relief of Medical Officers from purely administrative and executive duties, so that their time and energy may be devoted to professional activities.

*Chicago Tribune, Oct. 15, 1942.

Delousing Fluid

The thiocyanate compound, Lethane,* has been widely used in fly and cattle sprays, and recently has been found to be an efficient delousing fluid, when applied as a 15-percent solution in purified kerosene, as experiments have shown that one application will kill all lice and nits rather promptly. It is said to be not at all disagreeable to use, and the cost is less than one cent per person deloused.

If this preparation works out well, it will be highly valuable in the prevention of typhus and for the relief of much discomfort among soldiers and other persons living in crowded and more or less insanitary conditions.

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School for Medical Department Technicians

Technicians for service in various divisions of the Medical Department of the Army are being trained at William Beaumont General Hospital, El Paso, Tex.

Candidates for the laboratory, dental, pharmacy, x-ray, and veterinary training courses must be at least high school graduates, and these courses require 3 months. Trainees for medical and surgical technicians must have a common school education, and these courses last 2 months.

Physicians who know young men and women who might be interested in work of this sort will do well to write to the School for Medical Department Technicians, El Paso, Tex., for full particulars.

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Women in the Army

Bishop (Roman Catholic) Christian H. Wrinkleman, of Wichita, Kans., speaking for the American hierarchy and the English and Canadian bishops, says: "We do not favor the enlistment of Catholic women into the WAAC's or WAVES. We protest against women wearing uniforms or enlisting in the armed forces. We are not in favor of women with children engaging in gainful employment in our various defense plants.—*Birth Control News*, Oct., 1942. 1942.

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The rise and fall of civilizations are simply episodes in the history of usury. —H. T. MILLS, in "Money, Politics, and the Future."

*Rohm & Haas, Philadelphia.

THUMBNAIL THERAPEUTICS

Senile Vaginitis and Pruritus

• Of 21 cases of senile vulvo-vaginitis, Progynon-DH ointment, applied locally, produced marked improvement in 15, and partial relief in 6. Patients with inflammatory changes in an atrophic vaginal mucosa responded rapidly to local treatment.—Drs. R. S. Finkler and W. Antopol in *Endocrinol*, 25:925 (1939).

Sulfonamides in Infections

• Sulfadiazine, sulfapyridine, or sulfathiazole can be used for the treatment of infections of unknown cause, as each is effective for beta hemolytic streptococci as well as pneumococci and staphylococci. No sulfa drug has proved of value in the treatment of the common cold or influenza, arthritis, acute rheumatic fever, or tularemia, though small daily doses of sulfanilmaide may prevent *recurrences* of rheumatic fever. — A. E. Brown, M. D., in *Minn. Med.*, Nov., 1942.

Salyrgan by Mouth in Edema

• Patients with edema due to congestive heart failure are treated by complete rest in bed, digitalization, sedation, a salt-free diet, and 3 Gm. (45 grains) of ammonium chloride, daily for 3 days. A single dose of 5 Salygarn tablets* is then given orally, after breakfast, and repeated after from 4 to 6 days as indicated. The contraindications are the same as those for any other mercurial preparation. —K. L. Kickens, M. D., in *South. Med. & Surg.*, Sept., 1942.

Para-Aminobenzoic Acid for Gray Hair

• The use of 4 tablets daily of para-aminobenzoic acid, 100 mg. each, has resulted in the darkening of hair in both men and women. This is proved by "before and after" photographs. The medication should be taken for 4 months. —Lydia Devilbiss, M. D., in *Med. Woman's J.*, Nov., 1942.

*Each tablet contains 80 mg. of Salyrgan and 40 mg. of theophylline. Manufactured by Winthrop Chem. Co.

Oxygen in Acute Infections and Fevers

• In the treatment of acute, febrile conditions, and in many serious infectious diseases, death is due to exhaustion of the cardiovascular system. Among patients who are desperately ill, the energy consumed in satisfying the increased demand for oxygen may lead to this exhaustion. *Do not wait for cyanosis and dyspnea*, as these are symptoms of respiratory decompensation, and this might be compared to withholding treatment for a failing heart until cardiac decompensation appeared. — H. C. Hinshaw, M. D., and W. M. Boothby, M. D., in *Arch Phys. Ther.*, Oct., 1942.

Pertussis Vaccine in Asthma

• The injection of whooping cough vaccine has had dramatic results in 22 cases of bronchial asthma. The injections are given at intervals of from 3 to 6 days and the size of the dose is regulated by the patient's reaction (fever, local pain). Relief for periods up to a year have followed, when treatment was continued for from three to six months.—H. Sokal, M. D., in *South Med & Surg.*, Oct., 1942.

Low Back Pain

• Pain in the lower part of the back, in men, will frequently be benefited by massage of the prostate and dilation of the urethra. This result follows whether or not the prostatic secretion shows pus.—E. G. Ballenger, M.D., in *Urol. & Cut. Rev.*, Aug., 1942.

Eschatin in Shock

• In correcting the capillary atony of shock, I have had excellent clinical results with an extract of the adrenal cortex, given intravenously, in an initial dose of from 10 to 20 cc. of Eschatin (Parke-Davis), repeated at 15 to 30-minute intervals until a substantial rise in blood pressure was obtained. I have seen no deleterious results which could be attributed to the use of the material in quantities up to 150 cc. within the period of a few hours, in severly shocked individuals. —Charles R. Drew, M. D., in *Anesthesiology*, March, 1942.

DIAGNOSTIC POINTERS

The Diagnosis of Appendicitis

• We have yet to find a patient whose attack began with cramp-like abdominal pain; *followed* by nausea within from a few minutes to two hours; who developed tenderness at some point in the abdomen in from one to twelve hours; with a slight rise of temperature and elevation of the pulse rate, on whom the diagnosis of appendicitis was not confirmed by pathologic examination. One can have all the aforementioned symptoms but, if they do not come *in chronologic order*, you can put a question mark after the diagnosis of appendicitis. Nausea may not be present if the stomach has been empty for several hours.—C. N. CARRAWAY, M. D. in *Med. Times*, July, 1942.

Pyuria

• When sulfonamide preparations fail to clear the urine of pus, or when the improvement is only temporary, an obstruction at the bladder neck or in the ureter is the probable cause. A thorough urologic study is then needed. — E. G. BALLENGER, M. D., in *Urol. & Cut. Rev.*, Aug., 1942.

Tuberculin Test

• The tuberculin test detects tuberculous infection regardless of its severity. —ESMOND R. LONG, M.D., in *Journal-Lancet*, Oct., 1942.

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Prostigmin Test of Early Pregnancy

• Prostigmin may be given safely to pregnant women and is a reliable test for pregnancy, as well as an effective treatment of delayed menstruation uncomplicated by pelvic pathologic changes or marked endocrine dysfunction.

Three injections, of 2 cc. each, of a 1:2,000 solution of prostigmin methylsulfate are given on three consecutive days. If menstruation does not occur in the next two weeks, the patient is either pregnant; other pelvic lesions are present; or there is gross glandular dysfunction. —D. PARELLA, M. D., in *Northwest Med.*, Nov., 1942.

"Gas Pains"

• By the balloon and kymograph method, it has been demonstrated that the human stomach is hyperactive during the clinical appearance of (1) "gas pains"; (2) late postoperative nausea; (3) "pylorospasm" due to obstructive duodenal ulcer; (4) biliary colic; (5) the nausea and regurgitation associated with advanced carcinoma of the stomach; (6) certain instances of hypothyroidism; and (7) "vagotonia." The discomfort disappears as soon as stomach movements stop. This may occur spontaneously or after the intravenous administration of $\frac{1}{150}$ gr. atropine sulphate. In a few cases, a total of $\frac{1}{50}$ gr. was given before relief was obtained.—F. E. HAMILTON, M.D., in *J.A.M.A.*, Dec. 27, 1941.

Thiamine Deficiency

•The symptoms of vitamin B_1 (thiamine) deficiency will disappear within three days after treatment is begun. A neurasthenic syndrome, not responding to thiamine treatment in a week, is probably not due to vitamin deficiency. — *Am. J. Dig. Dis.*, Oct., 1942.

Warnings of Impending Suicide

• It is a common, and false, belief that the person who actually intends to commit suicide never talks about it beforehand, while the one who seeks only to gain sympathy always does. It is rare to find a suicide who has not given some previous indication of his intention. *Every physician should be on the alert for signs of impending suicide in his patients.—N.Y.S.J.M.*, Aug. 15, 1942.

Chronic Cough

• The chronic cough attributed to "asthma" or "chronic bronchitis," in older patients, may actually be due to an *indolent tuberculous process*, often accompanied by sputum containing tubercle bacilli. The menace of such occult cases, to family and friends, is obvious. Tuberculosis has been considered a disease of youth, and most deaths due to it occur between 15 and 30 years of age. Many who do not succumb, however, do not eliminate the infection.—*Tuberculosis Abstracts* (National Tuberculosis Association), Nov., 1942.

NEW BOOKS

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE, Waukegan, Ill., is accompanied by a check for the published price of the book.

A book is a friend whose face is constantly changing. If you read it when you are recovering from an illness, and return to it years after, it is changed surely, with the change in yourself.—
ANDREW LANG

OSLER'S MEDICINE
Christian

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the Use of Practitioners and Students of Medicine. *Originally written by* SIR WILLIAM OSLER. *Fourteenth Edition, Edited and Revised by* HENRY A. CHRISTIAN, A.M., M.D., LL.D., Hon. Sc. D., Hon F.R.C.P. (Can.), F.A.C.P., *Hersey Prof. of the Theory and Practice of Physics, Emeritus, Harvard University, etc. New York & London: D. Appleton-Century Co. 1942. Price, $9.50.*

To the older physicians, and to the fathers of the younger ones, "Osler" has been synonymous with the last word on the practice of internal medicine for fifty years, and this new, semicentenial edition bids fair to make it so for the present generation of medical men, since it is as new, for our times (expressing the personal ideas and experience of its distinguished editor, who in his earlier years worked with Osler), as the first edition was for the eighteen-nineties.

To discuss "Osler's Medicine," or the professional standing of Dr. Christian, would be superrogatory, so it merely remains to note the special features of this new edition.

The subjects are rearranged to accord with the present-day prevalence and importance of each disease, including newly identified diseases; and the latest accepted methods of treatment, especially chemotherapy, are stressed. The functional aspects of medicine, epidemiology, pediatric problems, and tropical and parasitic diseases are given more attention and space. Bibliographies, with accessible references, are introduced, and the index has been entirely remade — 100 double-column pages.

This is one of the basic books for all active clinicians.

CLINICS
Piersol

CLINICS. *Edited by* GEORGE MORRIS PIERSOL, M.D., *Professor of Medicine, University of Pennsylvania, Graduate School of Medicine. Philadelphia: J. B. Lippincott Company. June, 1942. Bimonthly. Price, $12.00 yearly.*

This issue of the *Clinics* is interesting to both civilian and military medical men. Three papers are devoted to the problem of burns, local treatment, and treatment with free skin grafts. Three papers consider the physiologic and clinical basis for treatment of shock, the use of plasma, and the general treatment of shock. The contributors to this symposium are Ravdin, Harkins, James Barrett Brown, W. E. Lee, Scull, and Meakins.

Headache of otorhinologic origin is stimulatingly discussed by Abraham Persky. David Gilmore presents an evaluation of cardiac efficiency. Abramson gives a long review of the affect of drugs on peripheral blood vessels in man. Seventeen articles in all are given.

The *Clinics* are well printed and the illustrations are clear and of teaching value; but a true "clinic" should present one or two patients, and then clearly drive home clinical and laboratory facts from their study, rather than mention them incidentally as case histories. *The patient is a fact;* the conclusions and opinions of the authors may or may not be.

ADVANCES IN INTERNAL MEDICINE
Steele

ADVANCES IN INTERNAL MEDICINE. *Editor,* J. MURRAY STEELE, M.D., *Welfare Hospital, New York University Division, Welfare Island, New York; Associate Editors,* WILLIAM DOCK, TINSLEY R. HARRISON, CHESTER KEEFER, ROBERT LOEB, WARFIELD LONGCOPE, GEORGE MINOT, and I. SNAPPER. *Vol. 1. New York: Interscience Publishers. Price, $4.50.*

This is the first book to be issued in what is hoped to be a series to be presented from time to time, as advances in internal medicine warrant. The articles are to be written by the men who made the advances, whenever possible, and are sufficiently broad so as to be useful to the general practitioner and specialist.

W. Osler Abbott writes of the use of the Miller-Abbott tube in the diagnosis and treatment of gastrointestinal disorders. This presentation is worth the price of the book. One of the really great achievements of the past decade is briefly and simply described, so that it may be used by all.

Lavietes discusses the use of insulin, plain and protamine, in the treatment of diabetes; Robert Wilkins the study of peripheral vascular system nervous control; Colin MacLeod the antibacterial action of sulfonamide drugs; Chester Keefer the choice of sulfonamides in the treatment of infection; Lowell Rantz the treatment of urinary infections; Irvine Page the stimulating new work on treatment of hypertension with renal extract; Thomas Francis the study of influenza; Farr the nephroses; and Harold Jeghers the clinical picture of riboflavin deficiency.

The volume is well worth while, and the next one will be eagerly welcomed.

ADVANCES IN PEDIATRICS
De Sanctis

ADVANCES IN PEDIATRICS. *Editor,* ADOLPH G. DESANCTIS, M.D., *New York Postgraduate Medical School and Hospital, New York. Volume I. New York: Interscience Publishers. Price $4.50.*

The contents of this book represent the pediatric advances of the past two years, as chosen by leading pediatricians throughout the country. Albert Sabin discusses a recently recognized disease of human beings, *toxoplasmosis;* Horace Hodes reviews virus diseases; Carey correlates chemotherapy in the diseases of childhood; Brill discusses electroencephalography; Poncher presents vitamin K as related to bleeding in the newborn; Robert Gross gives the present status of surgical cure of persistent ductus arteriosus; Tow presents in detail the care needed by the premature; Waldo

Nelson discusses tuberculosis; Murray Gordon has written a small monograph on that least understood of pediatric fields, the endocrines. The editor selects a few other advances in pediatrics and gives brief abstracts concerning them.

All of these articles will be of interest to the man who spends much of his time in pediatrics. The general practitioner will be especially interested in chemotherapy and endocrine diagnosis and treatment.

The publishers are to be congratulated on having the courage to carry out this worthwhile enterprise.

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DERMATOLOGY

Pillsbury, Sulzberger & Livingood

MANUAL OF DERMATOLOGY. *Issued under the auspices of the Committee on Medicine, National Research Council. By* DONALD M. PILLSBURY, M.D., MARION B. SULZBERGER, M.D., & CLARENCE S. LIVINGOOD, M.D., *Philadelphia & London: W. B. Saunders Co., 1942. Price, $2.00.*

This is one of the Military Medical Manuals prepared by the National Research Council, and should be in the hands of all Draft Board examiners and medical officers of the Army and Navy. It discusses, briefly and practically (with 109 teaching illustrations) the diagnosis and treatment, using the facilities of the battalion medical chest or the small ship or isolated station, of the commoner skin diseases of *men of military age*. No rare or obscure diseases, untried treatments, or histopathologic features are discussed.

Since the conditions stated are similar to those of the general clinician in rural practice, it should be very helpful to such practitioners.

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TECHNICAL AND COMMERCIAL DICTIONARY

Guerrero

NEW TECHNICAL AND COMMERCIAL DICTIONARY (Spanish-English). Contains more than 50,000 Words used in the Technical Professions and Skilled Trades, and in Commerce. *Compiled by* ANTONIO PEROL GUERRERO, *Industrial Engineer. Brooklyn, N. Y.: Chemical Pub. Co., Inc. 1942. Price, $10.00.*

Our relations with the South American countries make a knowledge of Spanish imperative for all engaged in technical or commercial activities, and this excellent and well-made dictionary makes available, to both English- and Spanish-speaking workers in these fields, a number of words which will be adequate for carrying on any ordinary correspondence or reading articles and reports, in either language, intelligently. It is an invaluable book for those for whom it is intended.

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PATHOLOGY

Anderson

SYNOPSIS OF PATHOLOGY. *By* W. A. D. ANDERSON, M.A., M.D., *Asst. Prof. of Pathology, St. Louis Univ. School of Med., etc., with 294 Text Illustrations and 17 Color Plates 1942. Price, $6.00.*

Since pathology now embraces at least six other basic sciences, the complete textbooks are so voluminous that the busy clinician is discouraged by their size; while the "compends" are so sketchy that they miss much vital information.

This volume fills the gap very well. It gives enough detail to make the subject clear, but is sufficiently condensed so that it can be used for quick reference. The many excellent color plates and illustrations convey much information with a minimum expenditure of time and effort. It will meet the requirements of most general clinicians.

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ELECTROCARDIOGRAM AND X-RAY STUDY OF THE HEART

Master

THE ELECTROCARDIOGRAM AND X-RAY CONFIGURATION OF THE HEART. *By* ARTHUR M. MASTER, B.S., M.D., F.A.C.P., *Cardiologist to the Mt. Sinai Hospital; Assistant Professor of Clinical Medicine, Columbia University, New York. Second Edition. Philadelphia: Lea & Febiger. 1942. Price, $7.50.*

This is the best form of teaching—from the patient. On the left hand page is a concise clinical history; on the right, the patient's electrocardiogram and chest roentgram. Preceding each type of heart disease, a brief section presents the important facts to be known.

The introductory discussion gives the technic for obtaining the roentgram and electrocardiogram. Normal graphic tracings and films are presented and analyzed. New illustrations show the visualization of the cardiac chambers following the intravenous injection of Diodrast. New sections have been added to include tricupsid valve disease, giant left auricle, myxedema, and acute diseases.

The clinician will welcome this opportunity to correlate his knowledge of two diagnostic methods and to make their findings more valuable to the patient.

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OTHER BOOKS RECEIVED

With Brief Descriptions

ELECTROPHORESIS OF PROTEINS, and the Chemistry of Cell Surfaces. *By* HAROLD ABRAMSON, LAURENCE S. MAYERS, and MANUEL H. GORIN. *New York: Reinhold Pub. Co. 1942. Price, $6.00.*

An important and highly technical book for biochemists and other research workers.

THE WRITER'S MARKET: 2,500 Publishers Buying Manuscripts from Free Lance Writers. *Edited by* A. M. MATHIEU. *Cincinnati, O.: Writer's Digest Pub. Co., 10th Edition, 1942-43. Price, $3.00.*

An indispensable book for all physicians (and others) who do freelance writing. It gives complete information about all reliable publishers who buy manuscripts.

SCIENCE IN WAR. A series of Popular Lectures given by Members of the Faculty of the Philadelphia College of Pharmacy and Science. *Edited by* L. F. TICE. *Philadelphia: American Journal of Pharmacy. 1942. Price, $1.00.*

This brochure answers many of the questions intelligent people are asking about the part played by science in this war.

A VENTURE IN PUBLIC HEALTH INTEGRATION. The 1941 Health Education Conference of the New York Academy of Medicine. *New York: Columbia University Press. 1942. Price, $1.00.*

Health education is one of the big jobs now, and every active physician can read these lectures with profit to himself and his community.

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